THE LIVELIHOODS AND DEVELOPMENT BIMONTHLY

SEPTEMBER–OCTOBER 2012
Volume 12 Number 10

NewsReach

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Inside

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Convergence of Livelihoods Creation: An Innovative and Proactive Initiative

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Transforming the lives of villagers by combining the resources of the community, the government and the local leadership, PRADAN uses collaboration and convergence as the basic approach in creating a significant impact on the livelihoods of the community

Professional Assistance for Development Action (PRADAN) has initiated a process of convergence of schemes, particularly MGNREGS, that directly benefits the poor in Dhamtari district, Chhattisgarh.

CONTEXT: RURAL POVERTY AND VULNERABILITIES

Dhamtari district has a population of 8 lakh people, of which 81 per cent live in rural areas. The district has a literacy rate of 78.95 per cent and ranks second in the state. However, the literacy rate amongst women is much lower, at 63 per cent.

People in this district belong to the Scheduled Castes (SCs), Scheduled Tribes (STs), Particularly Vulnerable Tribal Groups, (PVTGs) (Kamar) and landless household (Nishad, Kumhar, Yadav) communities, all of which are very vulnerable groups. The Gonds are one of the major tribes of the district whereas the Kamars, a PVTGs, constitute nearly 1 per cent of the total population and live in the Magarlod and Nagari blocks. Women form a disadvantaged group and as per the 2002 Census, 35 per cent of the rural households in the district fall in the below poverty line (BPL) category.

Fig 1: Relative Economic Status

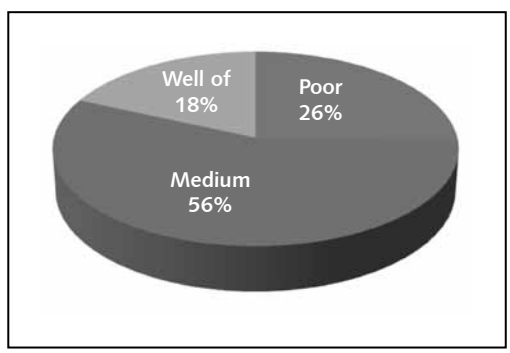
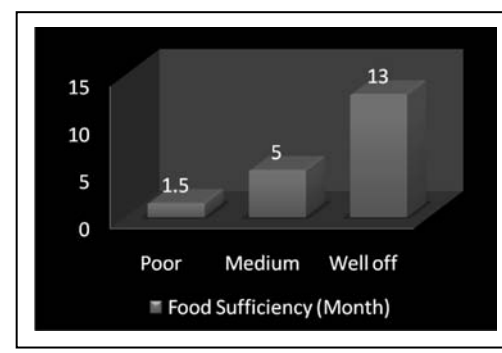


Fig 2: Food Sufficiency



Traditional rain-fed farming results in poor yields and insufficient food, consequently leading to insufficient capital for further investment. This is one of the primary reasons for the abject poverty in the district, and a sample survey in the tribal-dominated area of the district shows that almost 82 per cent of the total households are struggling to make ends meet. Food insufficiency coupled with alcoholism, leading to poor health, are major household-level vulnerabilities here. Out of distress, people from backward areas, especially from the Nagari block, migrate to the plains of Chhattisgarh. The public distribution system (PDS) in the district covers a sizeable area but provides inadequate support in addressing issues of food sufficiency holistically, especially among the poor. Thirty-four per cent of the gram *panchayats* (GPs) in the district are affected by flood and drought, making the district extremely vulnerable geographically.

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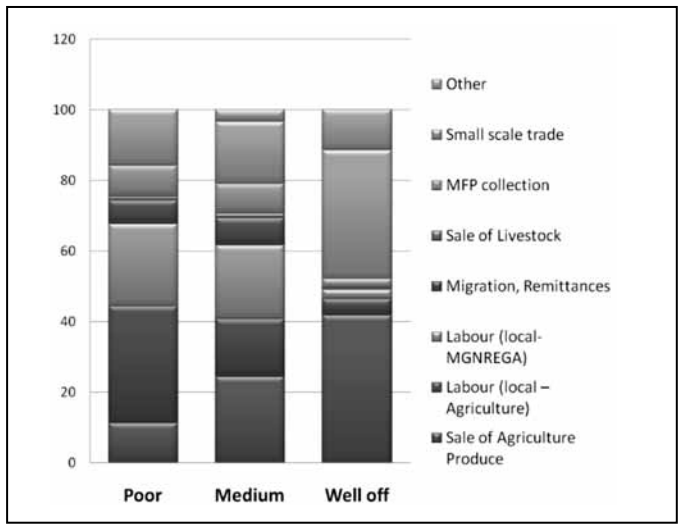
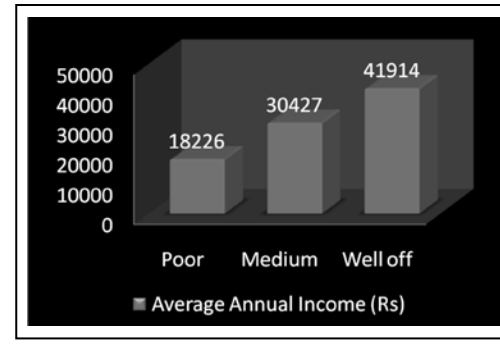
Fig 3: Sources of Income and their Contribution



LIVELIHOOD CONTEXT

About 85 per cent of the workers in the region are primarily engaged in agriculture as cultivators and agricultural labour. The Kamars are dependent on minor forest produce (MFP) collection, hunting and bamboo basket making work. As per the sample survey conducted by PRADAN, the poor, whose livelihood depends primarily on selling their labour, earn around Rs 18,000 per annum. For households that belong to the 'medium' category, selling labour, collecting MFP and engaging in subsistence farming are the major sources of livelihood. Poor productivity in agriculture and allied sectors and a depleting resource base (land, water and forest) are the major developmental challenges for sustainable livelihood at the household level in the district. The non-farm sector is underdeveloped in the district, and requires on-time credit, systematic training and marketing support.

Fig 4: Average Annual Income



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PRADAN'S ENGAGEMENT

For its area of operation, PRADAN selected a contiguous patch of 323 villages, covering a part of Nagari block, the forest fringe area of Magarlod block, and the Duban area of Dhamtari block in Dhamtari district and the Narharpur block of Kanker district. There are 37,000 families living in these villages, of which 80 per cent families belong to the STs and 61 per cent are officially BPL families. The team started its operation in this area in 2007 by organizing the community, especially the women into Self Help Groups (SHGs).

The major developmental challenges of the area, identified by the team, are:

a. Lack of food security from own cultivation
   - Low production leading to less investment in resources.
   - Limited irrigation infrastructure
b. Reduced participation of women in decision-making roles
c. Underdeveloped markets and services related to agriculture
d. Limited access of community to government schemes
e. Dependency on rapidly eroding non-timber forest produce (NTFP)

At present, in 2012, the team is working with 4,562 families, organized into 350 SHGs spread over 82 villages in the project area. The team is engaged in the following activities:

Last year, PRADAN worked with 919 families, using improved technology to produce paddy, millet, pulses and vegetables on 278 ha of land. About 35 per cent of the households got additional food sufficiency for three months and about 57 per cent of the households earned an income of more than Rs 10,000 from their own cultivation. Fruit trees (mango and cashew) have been planted by 500 families on 188 ha of uplands, land has been developed and in-situ water harvesting structures have been built. These structures have been built on 621 ha of land owned by 762 families.

THE INTERVENTION—CONVERGENCE FOR LIVELIHOODS CREATION FOR THE RURAL POOR

In 2008, PRADAN, in collaboration with NABARD, initiated a livelihood intervention programme with a fruit crop plantation in the uplands of selected villages in Dhamtari. The funds available under the project for the development of water resources to support the plantation and to facilitate inter-cropping were insufficient. This created the need for building linkages with the Department of Agriculture and Horticulture, to mobilize the remaining funds to develop water resources.

Initially, it was very difficult for PRADAN as well as the community (the SHG members) to draw resources from existing government schemes. After a year, when the effort and engagement of the community resulted in plantations of green mangoes and cashew in the barren uplands, it attracted the attention of the field-level officials. They started believing in PRADAN as well as the community. The officials supported the team by connecting the villagers with the Department of Agriculture and Horticulture and its existing schemes, to create irrigation infrastructure (such as bore

wells, sprinkler pipes, irrigation pumps and the construction of vermi-composting units) and gave various inputs for cultivating field crops and vegetables. Gradually, PRADAN stepped back, and an organic relationship between the field-level officials of the department and the SHGs slowly emerged. The officials scheduled their visits according to the meeting schedule of the SHGs and started using the local Community Service Providers (CSPs). The CSPs had been groomed by PRADAN to provide technical help to SHGs. The community also reciprocated by supporting and appreciating their efforts at different forums. Post this, discussions began with the SHGs for the development of other land, harvesting of rainwater and MGNREGA. In early 2010, PRADAN received a small grant from the Sir Dorabji Tata Trust (SDTT), Mumbai, to demonstrate land and water resource development work in one village. There, PRADAN demonstrated in-situ water harvesting and land development work in a contiguous patch of 17 ha belonging to 32 families. The results were particularly encouraging because crops in other patches of land struggled to survive for want of water whereas there was sufficient water in the farm ponds to save the crop in this land. PRADAN organized several exposure visits to the village, and the community became enthusiastic about planning the development of land and water resources. With the link now firmly established between the community and the field-level officials of the Department of Agriculture and Horticulture, the community was motivated to engage with the *gram sabha* for MGNREGS. This meant that the doors were opened to plan for land use at the household level and to converge different schemes as per the need of the households. Most importantly, government officials at the district level also came forward to support these initiatives.

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OBJECTIVES OF THE INTERVENTION

The objectives of the intervention were to:

- Enhance productivity of resources (land and water) by following the Integrated Natural Resource Management (INRM) approach.
- Use collaboration and convergence as the basic approach in creating a significant impact on the livelihoods of the community.
- Plan according to the need and demand of the community.
- Encourage involved participation of the community (the SHGs and the *gram sabha*) in both, the planning and the implementation process.

With these objectives in mind, PRADAN demonstrated (initially in one village) the entire process from the beginning of the planning stage to the implementation and monitoring of the intervention. The process helped develop and standardize formats, estimates and processes for future replication by PRADAN itself as well as by other government functionaries. Until date, PRADAN has replicated this land use-based planning at the household level in 14 villages of Dhamtari district and 10 villages of Kanker district. The implementation was done by synchronizing the convergence of various government schemes.

PROCESS

a. Village Selection

Based on previous experiences, the team selected a village wherein approximately 60–70 per cent of the households were first mobilized and then organized into SHGs. This was done because a significant number is required to influence the *gram sabha* and the GP, for these bodies to pay attention to the needs of the community. The community, which is now aware, organized and mobilized, can get its plans approved, and exert pressure on the district and block officials for the required sanctions on time. The numbers are also needed to check the irregularities that might emerge and to ensure proper implementation of the work under MGNREGS as well as other programmes. This newly organized community was also able to support and empower the *sarpanch* in dealing with the bureaucracy. Moreover, wherever government functionaries were replicating the model under the guidance of the MGNREGS cell at the district level, the community selected a GP in which the *sarpanch* was pro-active and development-oriented.

b. Planning

The hamlet/village was taken as the base unit for planning. Exposure visits for SHG and Panchayati Raj Institution (PRI) members to villages were organized, wherein the community came forward to plan and implement land and water resource development-based activities. This was done in order to enhance the production and yield of the land. Along with this, hamlet-level meetings were organized immediately after the exposure visit, in order to decide whether the community is interested and whether it can pursue the plan in its own *gram sabha* and with the administration.

Planning is an extensive three-day exercise, in which the present status, the use of resources and the potential for using these resources further are assessed. The present status of existing schemes in the village and related subjects are discussed in detail. The plan is then prepared and tasks are divided among PRADAN team members, the CSP and SHG members. In this process of task allocation, the engaged participation of the SHG and the PRI members is sought and hence ensured. PRADAN team members facilitate the entire planning process and a plan is prepared for the duration of a year. This is because it fits easily with the requirement of the concerned government departments, which are aware of the funds available for the work and can ensure proper implementation. Afterwards, the first-hand experience of the work done in the first year is minutely analyzed, in order to help the community prepare a better plan for the next year. During the planning exercise for the first year, different departments such as agriculture, horticulture and fisheries are involved. This is done in order to support the community in linking its plan to the utilization of assets, planned under MGNREGS. Subsequently, when the existing schemes of the district are mapped in the 'planning format', the community makes a plan with the schemes, in the same way as the government departments plan for MGNREGS

The planning process involves the following stages:

I. **Social mapping:** The community conducts a 'social mapping' of the village, in which all households of the hamlet and all available resources and facilities are depicted. The mapping helps identify the missing facilities or resources that the community needs such as a hand pump, an *anganwadi*

centre, toilets, etc. The plan then seeks to incorporate these.

II. **Resource mapping:** This involves depicting different types of land (upland, medium land, lowland, and homestead), available water bodies and vegetation on the 'revenue map' of the village. The status of resources, their use and the returns earned through these are discussed with the community. Along with this, the alternative and potential use of the same resources and the expected returns from these are discussed, in order to help the community in developing a vision. Based on specific considerations such as patches on the ridge, the relative status of the family, etc., the community selects a patch for the annual plan.

III. **Transect visit:** Post the social and resource mapping, representatives from all households that own land in that patch, along with SHG members, PRI members, CSPs and PRADAN professionals, visit each plot within the patch. The land-use options and the work needed to be done are then discussed, based on the location of the land and the other resources available.

IV. **Finalization of the plan and activity mapping:** After the transect visit, a meeting is organized at the hamlet or the village level, to finalize the options discussed during the transect visit. The community then depicts the final plan on the revenue map of the village.

V. **Types of planned work:** The type of work, commonly planned, includes the following:

(i) Under MGNREGS: Farm pond, dug well, field levelling; bunding, plantation

(ii) MGNREGS and Horticulture: Orchard, nursery shed for vegetable cultivation

(iii) Community nursery for grafted fruit plant to the SHG, MGNREGS and TSC: Toilet

(iv) Department of Agriculture Horticulture: Bore well, composting, distribution of farm implements, sprinkler pipes and agricultural inputs

(v) Department of Fisheries: Distribution of inputs for fisheries, training, etc

(vi) CREDA: Biogas

VI. **Documentation**

a. Work planned under MGNREGS: Villagers have to submit an application, a copy of the job card and land records; the PRADAN team then helps them with computer-related work. The community then deals with the *patwari* (a government official who keeps records regarding the ownership of land) for the land records. Usually, the *patwari* is invited to the village, and after the required documentation, the community submits the plan to the gram *sabha* and the GP. The community then takes the related receipts and submits a copy of the same to the block and district offices for sanction. The PRADAN team intervenes only if there is a problem. PRADAN helps the district and its relevant departments in preparing a 'model estimate' for the first time. Subsequently, all the work is sanctioned as per this 'model estimate'.

b. Work planned under other departments:

The CSP helps SHG members to fill relevant forms and attach the required documents such as the copy of the land records, etc. The community then submits the application to their respective government departments and, subsequently, submits a consolidated plan sheet to the district office.

IMPLEMENTATION

a. Work planned under MGNREGS

After obtaining an official sanction from district-level officials, a 'work order' is released by the block to the GP, in which the GP is the work agency and the government department is the implementing agency. The community selects mates and *rojgar sahayaks* in the *gram sabha.* PRADAN conducts a training for the mates, the *rojgar sahayaks* and the technical assistants of the block before the initiation of the work. Mates note the daily measurement and record the attendance, which is signed by each worker, and which ensures that the work qualified as one working day is indeed done. The community monitors the work for quality and checks irregularities. In some instances, SHG members are recognized as the village monitoring committee, VMC. The *rojgar sahayak,* with the help of the mates and the daily measurement register, prepares a muster roll, and the technical assistant of the block checks the measurement and evaluation of the work done. All the GPs are organized into clusters and a roster (starting from the day of initiation of work to the day of payment) is prepared for each cluster. This helps in making the community aware about the procedure before the payment. They are then able to follow each step with the *rojgar sahayak* for timely completion of different tasks. Work planned under other departments meant that the concerned department sanctions all work, planned exclusively with other departments and not necessarily in convergence with the MGNREGS. The field-level officials of the department implement the plan in co-ordination with the SHG and the CSP.

b. Monitoring

As part of having a proper system of checks and balances, representatives of different SHGs at the hamlet or the village levels meet every month, to monitor the progress of the plan. They use a monitoring sheet, to help

MINIMUM REQUIREMENTS

- All poor/job cardholders to be organized into SHGs
- A facilitating agency for continuous follow-up and for coordinating work among the beneficiaries
- Exposure visits and capacity building activities for various stakeholders
- Individual involvement of higher officials
- Forming convergence committees at the district and the block levels, to monitor and step up the task
- Presence of officials of different departments in planning meetings and for continuous monitoring at the village level
- Needs of individual job card holders to be assessed.

ascertain the status of each part of the plan; an action plan is prepared during the meeting for a follow-up with the relevant departments, block and district. Roles/tasks are divided among the members, after which a follow-up is conducted in the *gram sabha*. The district collector also monitors the progress of the plan from time to time, during his meetings with the department heads.

c. Replication

A workshop on NRM-based planning and convergence was organized for the block *panchayat*-level functionaries and the PRI at Chhindbharri village, to facilitate peer-to-peer learning.

The CEO, the Panchayat Officer, the technical assistants from all the blocks, the *sarpanch*, the *sachiv* and the *rojgar sahayak* from the selected GP participated in the event. The SHG became the pioneer in spreading the message when the orientation and training was provided to the local youth (CSPs/Bharat Nirman Volunteers), in order to support the community in the planning and the documentation processes. The technical assistants were trained in preparing land use-based village plans, and the mates and the technical assistants were trained in implementing the plan. The planning formats that were developed were circulated to all the GPs for their annual plans; and the other departments used the village plan as the base for their own plans.

OUTPUT

The planning process boosted the self-confidence of the community because it got a clear perspective about how to create plans. The community was successful in producing a proper working plan with the PRI as well as government officials and brought the community together for INRM. The process brought government departments together, leading to an effective convergence. This convergence was mainly of two types: it included different departments focusing on a single family and different departments working for a similar activity such as the *sabji kuti* or the community nursery. A village development plan was prepared for 56 villages spread over three blocks, namely Nagari, Magarlod and Dhamtari. The plan aimed at directly benefiting the livelihoods of 1,009 rural households by developing their resource base. Most of the work planned for the first year has been completed. The plan for 2012–13 has been approved by the *gram sabha*. PRADAN is directly engaged in only 24 villages. In other villages, PRADAN supports the government staff and the interventions of the agriculture and the horticulture departments through their on-going programmes for irrigation support (bore wells, pumps, pipes), agriculture equipment (sprayer, weeder, etc.) and inputs such as seeds, bio fertilizers and bio pesticides. These are mobilized as per the plan to facilitate the utilization of the assets created.

a. The Outcome: Village Chhindbharri

The village of Chhindbharri is near Madamsilli dam and is 30 km from the district headquarters of Dhamtari. It is 50 km away from the block headquarters at Nagari. There are 75 households in the village with a total population of 415. Ninety-five per cent of these are Scheduled Tribes (STs) and 85 per cent are BPL households. The average landholding in the village is five acres; marginal farmers constitute 32 per cent of the total households and small farmers constitute 33 per cent. The village has 52 per cent uplands; 29 per cent medium lands and 19 per cent lowlands. Fifty per cent of the households are food sufficient for six months or less and 38 per cent are food sufficient for six months to one year in the village.

Labour (agriculture, MGNREGS and migration) constitutes 55 per cent of the primary sources of income; NTFP collection and trading constitutes 24 per cent whereas other household activities (fishing, trading, etc.) constitutes 21 per cent of other sources of income.

There are five SHGs and one village-level committee, promoted under the various programmes, in the village. Forty-two families of the village were facilitated by PRADAN in 2009, to develop orchards of mango and cashew in 35 acres of marginally utilized upland, with financial support from NABARD and the Department of Agriculture and Horticulture. Land and water resource development work under MGNREGS in 2010 included a participatory plan prepared by the SHG being presented to the *gram sabha* and being approved. The plan also includes the development of an irrigation facility, composting, agriculture implements and other inputs in convergence with the agriculture and horticulture departments. Infrastructure was developed to harvest 56,380 cu m of rainwater in the fields of 31 families. Soil erosion was checked in 91 acres of land of 31 families and an additional 40 acres were covered by irrigation. This resulted in enhanced income from agriculture because more than 60 per cent of the households earned an income of Rs 15,000 and above.

b. Effect on individual households

Sushila Bai and Kisun Netam

Sushila Bai is a member of the Bhumi Swa Sahayta Samuh of Chhindbharri village and has one-and-a-half acres of land, of which one acre is upland and the rest is a paddy field. The returns from agriculture were not sufficient to meet the basic requirements of the family. Her husband, Kisun Netam, was primarily an agricultural labourer, who used to migrate

THE STORY OF TULARAM MARKAM

Tularam Markam is a resident of Amlipara village of Nagari block in Dhamtari district. He owns about 4.5 acres of land. About 3 acres of his land is upland, which is marginally cultivated because it is undulating, has poor soil fertility and no irrigation support. The remaining 1.5 acres are used to cultivate short duration paddy due to lack of irrigation support. It contributes about six months of food to Tularam's family. Wage labour is the other source of income for his family. During the planning process at his village, Tularam decided to develop his upland as a fruit orchard, level the medium and low lands and build two farm ponds. Tularam developed an orchard in 2.5 acres of upland, with support from NABARD and the Department of Horticulture. He also planted mango and cashew plants in his land; and MGNREGS helped him construct a cattleproof trench (CPT) in the orchard as well as in the medium land. He created a farm pond in the medium and the lowlands for paddy cultivation and constructed a low-cost nursery shed for vegetable cultivation in his orchard, with support from the Rashtriya Krishi Vikas Yojana (RKVY) and MGNREGS. Tularam then went on to complete 100 days of work under MGNREGS. This year, in 2012, Tularam cultivated chilli, groundnut, tomato, brinjal and turmeric in the upland and paddy in the medium and low land and earned an additional income of about Rs 25,000. He was supported by the Department of Agriculture and Horticulture for inputs such as seeds and implements, and PRADAN provided training and technical support to him.

to the plains of Chhattisgarh for 45–60 days a year to harvest paddy. Seeing the fruit plantation in the adjoining land and the development of irrigation infrastructure, Sushila Bai felt motivated and decided to venture into fruit and vegetable cultivation in her one acre of upland for the first time. She planted 25 mango and 30 cashew plants in 2010 and grew some vegetables. Slowly, she developed her land, constructed a *sabji kuti,* with support from MGNREGS, and got a sprinkler pipe from the Department of Horticulture. She cultivated potato, brinjal, tomato, chilli, bottle gourd and sponge gourd and earned about Rs 33,000 from the land; earlier, from the same land she earned less than Rs 1,000 a year by cultivating black gram. Last year, her husband did not migrate for paddy harvesting. He stayed in the village and worked for 100 days under MGNREGS.

A mobilized and organized community is critical for preparing and implementing plans. Following up with the GPs and relevant government departments for sanctioning and proper implementation is equally important.

LEARNING

A mobilized and organized community is critical for preparing and implementing plans. Following up with the GPs and relevant government departments for sanctioning and proper implementation is equally important. The presence of a facilitating agency (such as PRADAN) is necessary for continuous co-ordination between the community and various government departments involved. It is essential to facilitate exposure visits and organize capacity-building activities for the community and other stakeholders involved, from time to time. The administration, the GP and the community are the three major stakeholders involved in the programme and, eventually, the three need to be involved and their activities coordinated.

One could begin with collaborating with any one of the most favorable stakeholders; however, engagement with only one stakeholder alone is not enough. This is important before any major scale-up. Government officials, especially those working at the field level, struggle to achieve their targets and many times adopt other means to do so. They generally do not receive any support from the community; on the contrary, they usually receive complaints at different forums. Appreciating them for what they have done will help and influence them to work in an organized and efficient way. PRI members (especially in tribal-dominated areas such as Chhattisgarh), including the *sarpanch* and the *janpad sadasya,* are often misunderstood by both the community as well as the officials. It is important that they are supported (something which is usually missing) in order to serve the community better. An organized community (the SHGs), with the orientation of building linkages, can empower these PRI members to put pressure on the delivery mechanism of the government. Support from higher officials at the district level is always helpful and hastens the process, and no one can deny the importance of a genuine demand by an organized community. Engagement with the GP and the departments at the district level is required for technical support as well as to build a system and process favourable to the community.

SHG Federation: An Institutional Innovation to Sustain SHGs

C.S. REDDY

Exploring the great potential of the SHG federations, to address poverty by serving as a platform for providing financial and livelihood promotion services, this article traces their evolution, significance, limitations and uniqueness—where women are the owners, managers, users and beneficiaries

INTRODUCTION

A Self Help Group (SHG) is an informal group of 10–20 members of similar socio-economic background, that come together for a common objective, having developed its own norms and holding regular meetings to engage in savings and credit activities to improve livelihoods. The SHG movement in India began in the 1980s, with several NGOs experimenting with social mobilization, organizing the rural poor into groups for self help and mutual benefit, mainly women's empowerment and poverty reduction. The SHG bank linkage programme (SBLP), under the leadership of NABARD, which built upon these initiatives, will be completing two decades of existence soon. The SHG movement has come to mean more than merely the provision of financial services to group members, composed mainly of poor women. The role of SHGs in financial intermediation holds greatest promise as a means of continued financial inclusion and mainstreaming of poor families, as well as a development model with wider application.

According to a report—'Status of microfinance in India 2011—by NABARD, as on 31 March 2011, approximately 7.5 million SHGs have savings bank accounts and 4.8 million SHGs have taken a loan from a bank. The total amount of bank loans outstanding with SHGs as on 31 March 2011 is Rs 306 billion, with an average per group loan of Rs 122,744. The SBLP in India is perhaps the world's largest community based microfinance programmes in the world. In spite of the phenomenal success in terms of outreach to the poor, many practitioners and policy makers are of the opinion that the SHG–Bank linkage model has not succeeded because it still is an uphill task for an SHG to open a bank account or to access a bank loan in many states in northern and eastern India. (According to Dr. Y.C. Nanda, former Chairman of NABARD, the SHG model has been successful in delivering development interventions through the SHGs; however, the SHG-Bank linkage model has not been successful.) Over a period of more than 20 years, the growth of the SHG movement has been phenomenal, being the strongest in South India. Starting from 1999, the rural development department of state governments has taken up promoting SHGs under the Swarnajayanti Gram Swarozgar Yojana (SGSY), a Government of India (GoI) programme for Rural Development, either through their partner NGOs or directly through their own staff. In some states, the women and child development department also played a significant role in the promotion of SHGs.

The SHG movement has come to mean more than merely the provision of financial services to group members, composed mainly of poor women.

There are a number of issues and challenges associated with scale because there are more than 8.5 million SHGs in India now. (Although only 7.5 million SHGs have bank accounts–some of which were opened several years ago and are not active now–as per NABARD data, there are at least another one million SHGs waiting for the banks to open their account and provide them a bank loan.) The challenges include the uneven quality of SHGs; the limited attention paid to the savings of SHGs; the continued reluctance of bankers, particularly in North and Northeast India, to open bank accounts; the limited capacity of the staff of the SHG promoters; book-keeping issues, irregular meetings and non-compliance to their own norms. A large number of groups do not understand why they have come together; there is limited member education, particularly on financial literacy and group dynamics; these SHGs have become a channel for delivery of various government schemes, becoming a strong demand system; political interference is widespread; not much attention is paid to the annual audit of SHG accounts and leadership rotation at the SHG level; and, above all, the government being the largest promoter of SHGs, these groups are promoted through a target-oriented approach with limited attention to processes, undermining thereby the sustainability of SHGs. The limitations of scaling up without ensuring quality affected the ownership of the SHGs, impairing sustainability. Although these are called SHGs, in practice many of these SHGs do not follow the principles of self-help, self-management, self-control, self-responsibility and self-reliance.

EMERGENCE OF SHG FEDERATIONS

The tremendous success of the SHG movement relied heavily on promoting institutions to mobilize, train and support groups. In the late 1990s, the government became the key promoter of SHGs, especially in South India. As the number of groups grew, the involvement of self-help promoting institutions (SHPIs) and

MAJOR MILESTONES IN THE SHG MOVEMENT IN INDIA

Phase I (1980s): NGOs promote women's SHGs as an alternative to mainstream financial services, to reach the unreached segments of society.

Phase II (1992): NABARD takes the lead in partnering with NGOs to pilot the well-known SBLP.

Phase III (2000s): State governments, particularly in the South, take a proactive role in the promotion of SHGs in a big way, by providing revolving loan funds and other support, using SHGs as a channel for delivery various welfare schemes.

Phase IV (2005): The SHG-Bank linkage reaches the scale of over a million bank-linked SHGs, much before the projected year—2008.

Phase V (1990s): SHG federations, piloted by NGOs, emerge to sustain the SHG movement and to provide value-added services.

Phase VI (2005): SHGs and SHG federations gain widespread recognition, partnering various mainstream agencies such as financial institutions, the corporate sector and the government.

direct contact with the groups have greatly diminished. The SHPIs find that they are unable to provide groups with similar attention and quality of inputs as they did earlier. The SHPIs began to think of setting up an apex-level body that is able to take on many of the tasks of the SHPI, thus enabling them to leverage their limited resources in the most judicious manner possible. The SHG federation is expected to address many of the issues and challenges faced by the SHG movement in the country and ensure sustainability of the SHGs.

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Considering that these are informal groups, they are less likely to be intergenerational institutions. Also, these being small groups, the economies of scale are an issue. For the promoters to withdraw from SHGs, therefore, there is need for some institutionalized mechanism that will provide need-based support to the SHGs. Although the SHGs have become credible and effective partners to many, they themselves are facing a number of constraints and challenges. These include: (a) the uneven spread of the SHGs across the country, (b) the inability to take up livelihoods promotion, (c) the inability to take up larger issues of gender and social inequality and women empowerment, (d) the limitations of promoters to provide capacity building and other necessary inputs at a desired scale, and (e) the inability of banks to understand and accommodate the needs of SHGs in some parts of the country, especially in under-served regions. In the 1990s, the idea of shifting the role of promoting SHGs to federations, in a given geographic area of a village or a cluster or a block, emerged.

Defining an SHG Federation

The dictionary says a federation is 'an association of autonomous bodies uniting for common perceived benefits'. The Tamil Nadu Corporation for Development of Women (TMCDW) defines a cluster-level federation as 'a network of several SHGs and a structure or body evolved by SHGs themselves, consisting of representatives from all member SHGs, with a motive of supporting member-SHGs to attain the goals of economic and social empowerment of women members and their capacity building'. Ajay Nair (2005) defines federation as, 'an association of primary organizations. Primary organizations may federate to realize economies of scale or to gain strength as an interest group'. According to an APMAS (2005) study, "An SHG federation is a democratic body formed with certain number of SHGs functioning in a specific geographical area, with the objective of uniting such SHGs for common cause and for achieving these causes, which an individual SHG would not be able to do. In short, an SHG federation has to be necessarily of SHGs, by SHGs and for SHGs." A simpler understanding of an SHG federation could be that a federation is a group of groups; the primary groups may be formal or informal whereas the federation is formal.

Why SHG Federation?

One main objective of promoting SHG federations is to overcome the inherent limitations of small and informal groups–the SHGs–such as limited resources, capacity, and negotiation and bargaining powers, and an inability to deal with the outside world–the government, mainstream institutions, markets, etc. The benefits of federations include those arising from (a) economies of scale, (b) reduction in transaction costs, (c)

reduction in default rates at all levels, (d) value added services, (e) reduction in the cost of promoting new SHGs (that is, the cost of reaching out to every poor woman) and (f) increasing levels of financial discipline and accountability among SHGs. Some other objectives are: inter-group rotation of funds; accessing bulk loans and grants from external sources; gradual handover of functions of SHPIs to community-based organizations (CBOs); promoting leadership skills and governance among SHG members; and developing poor people's own institutions. SHG federations function as per the subsidiary principle, meaning they only undertake those roles that member SHGs are not able to do on their own.

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The concept of a federation emerged from the felt need of the SHGs that were functioning well and keen to come together for sharing experience and learning. The rationale behind the promotion of federations is: i) to strengthen existing SHGs, ii) to promote new SHGs of the poor, iii) to access various services to member SHGs, iv) to provide a sense of solidarity among members of different SHGs in an area, v) to enhance sustainability of the SHG movement, vi) to facilitate linkages and vii) to empower women. Besides, federations play an important part in SHG capacity building and conflict resolution—both internally and externally. SHG federations sometimes assist promoting institutions and at other times are of direct benefit to members. Promoters may have different reasons for federating SHGs at different levels such as i) scaling up, ii) as a withdrawal strategy, iii) becoming issue-based, iv) for collective bargaining power, and v) the principle of subsidiary.

Until 2007, NABARD ignored the widespread emergence of SHG federations, excluding them from its mandated innovations. Girija Srinivasan & Ajay Tankha (2010) say, "NABARD does not view the financial intermediation role of federations favorably and is willing to accept the same only as an unavoidable necessity where it could be done with profitability and sustainability." Of course, financial intermediation by federations is not the only alternative; the other one being their role as a support organization. Besides capacity building, supervision and other services, this might also include the facilitation of access of SHGs to bank loans. In September 2007, NABARD issued a circular on providing grant support to strengthening existing SHG federations involved in social intermediation. SHG federations have the potential to bridge financing agencies with the SHGs, to meet the loan fund gap in the period that they have an active loan from the bank, during which period they are not eligible for another bank loan.

Whereas a strong case for federating SHGs has been made so far, based on more than 15 years of experience of working with SHG federations, it must also be stated that there are certain limitations and risks related to SHG federations, which must be effectively addressed when designing and promoting them, to optimize the benefits of the members. In the context of many state governments being aggressively involved in promoting SHG federations, using external funds from multilateral agencies and the National Rural Livelihoods Mission (NRLM), also called Aajeevika Mission, is a GoI initiative to address rural poverty. The mandate of NRLM is to

reach out, mobilize and support an estimated 7.0 crore rural poor households across 600 districts, 6,000 blocks, 2.5 lakh *gram panchayats,* in 6.0 lakh villages in the country into their self-managed SHGs and their federal institutions and livelihoods collectives; link them to livelihoods opportunities and nurture them till they come out of poverty; and enjoy a decent quality of life. In its reckoning, strong and vibrant institutions of the poor at various levels are central for the poor to emerge from and stay out of poverty. Adopting the SHG federation model in its implementation framework, these limitations and risks become more pertinent:

- Building SHG federations requires significant investment of funds and a higher level of capability among the promoting agency in institutional development.
- SHG federations face the real risk of political and elite capture.
- Different tiers of SHG federations being co-terminus with the administrative structure of the state governments, there is possibility of the state co-opting these federations. An SHG federation may become a delivery channel for government schemes and may not be able to evolve into a strong demand system.
- If an SHG federation fails, it may adversely affect all member SHGs.
- If SHG federations are built on a weak foundation, that is, the SHGs are not vibrant or self-managed, a weaker SHG federation may become a burden on the SHGs.
- If SHG federations do not recruit staff emerging from the SHG movement, the women may not be able to manage hired staff, resulting in the staff running and controlling the SHG federation, leading to weak governance and ownership.
- There is a strong temptation for SHG federations to get into financial intermediation, in spite of weakness in governance, management and systems.
- SHG federations may acquire a legal status that may not suit their business.
- Lack of vision of the promoters may lead to non-sustainable SHG federations.
- SHG federations should be promoted only after the SHGs are strong when there is a felt need among the SHGs to federate and build strong social capital.

The promoters need to be fully aware of the benefits and the risks of promoting SHG federations. These must also be effectively communicated to SHG members during their meetings for them to make informed choices. In the ultimate analysis, SHG federations have significant benefits even when these associated risks are taken into consideration. Based on the experience of promoting autonomous and self-reliant SHG federations, lessons learnt and the emerging best practices, the risks can be minimized, if not completely eliminated, and SHG federations can be promoted in a manner that will add great value for the SHGs and their members.

Multi-tiered Federation Structures

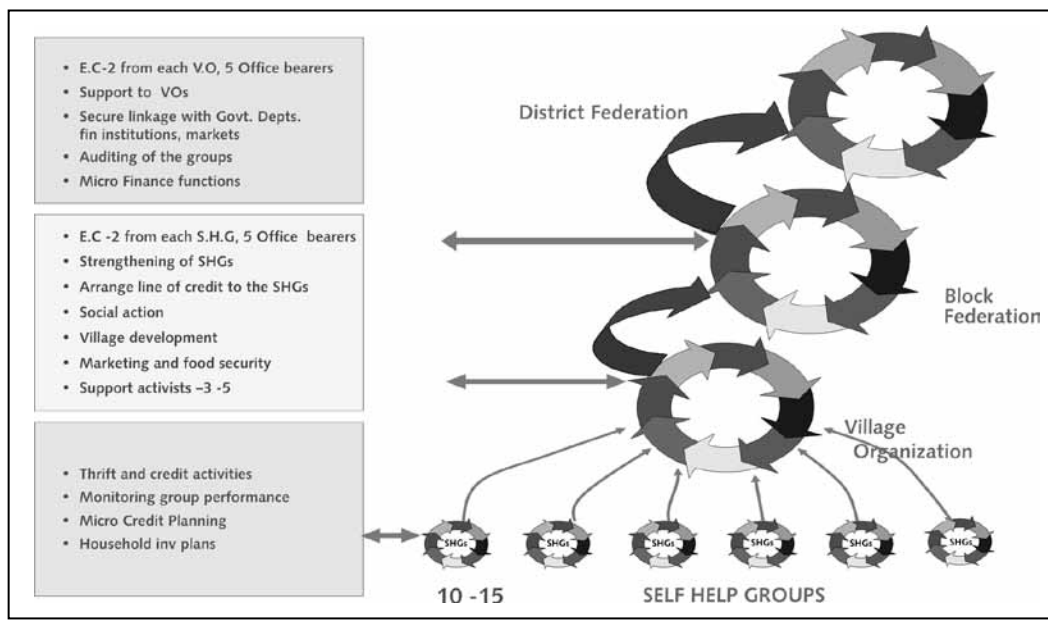
In India, SHG federations are multi-tiered. The women in a village are organized into SHGs; the SHGs in a smaller geographic area (usually a village) are organized into primary-level SHG federations (PLFs). Several PLFs in a given area are organized into secondary level federations at sub-district level (SLFs). These secondary federations may be further networked into apex federations either at district or state

levels (ALFs). In the urban areas a similar structure is promoted, namely, the SHG slum-level federation, town-level federation, and the corporation-level federation. In smaller municipalities, there is a 3-tier structure. In municipal corporations, there is 4-tier structure, promoted by the Urban Community Development (UCD) department of the corporation.

PLFs are typically at the village level, sub-village level, *panchayat* level or village cluster-level or slum-level federations of SHGs, for example, village organizations and *panchayat*-level federations. Unlike the government, NGOs do not cover all families/communities in any village in their programmes. They focus on certain target families and communities in a village and usually do not get enough SHGs within that village to federate. As a result, they federate their groups of few nearby villages into PLFs known as cluster level federations (CLFs). The SHG being an informal group, this primary level network is the first level of formalization.

SLFs are federations of PLFs. Usually these are sub-district level federations. In India, the administrative units between the district and the *panchayats* are called by different names in different parts of the country such as *mandal, taluka,* block and division; the area of each of these is also different. ALFs are federations of SLFs. They are usually district-level federations. There is a real rush to promote multi-tiered SHG federations, particularly among government promoters in Tamil Nadu, Bihar, Orissa, Madhya Pradesh, Rajasthan and West Bengal, which have federations at each of the administrative levels: village *(panchayat),* block and district. Based on APMAS ratings and assessments of almost 500 SHG federations in ten states and working very closely with more than 1,000 SHG federations, both in rural and urban areas, it is found that the primary federations at the village or cluster level, which are closer to the SHGs and their members, are the most valued federations by their members because they can demand services, easily relate to them and participate actively in their management. The process of promoting SHG federations has to

Fig 1: SHG Federation Model



follow a participatory approach. After having supported the SHGs to promote their own primary level federation, if at a later date, the need for a higher order federation emerges, need-based support can be provided by the promoter. In the initial period, the SHG federation may be an informal body, which is registered when its by-laws and business rules are finalized. A higher order networking of primary SHG federations could act as self regulatory bodies and for issue-based policy advocacy. Another possibility for a registered federation of SHGs could be at the sub-district level, with SHG federations at village/ *panchayat* level being the branches of the registered federation.

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Growth and Spread of SHG Federations

In India, there is no official data about SHG federations. For the past few years, APMAS has been compiling SHG federation data from web search, direct contact of major resource agencies and from the database of ENABLE, a network of seven resource NGOs, anchored by APMAS (Hyderabad, Andhra Pradesh), with Centre for Microfinance (Jaipur, Rajasthan), Chaitanya (Rajgurunagar, Maharashtra), Indian School of Microfinance for Women (ISMW, Ahmedabad, Gujarat), Reach India (Kolkatta, West Bengal), West Bengal SHG Promotional Forum (WBSHGPF, Kolkatta, West Bengal), Sampark (Bangalore, Karnataka) as it members, working together to build the capacity of SHPIs and for policy advocacy for community based microfinance.

Table 1: SHG Village Organizations and Higher-level Federations, 2010

State	SHG Federations	Village-level Federations
West Bengal	51,354	49,433
Andhra Pradesh	45,752	44,502
Kerala	18,101	17,040
Tamil Nadu	13,617	13,443
Orissa	8,895	8,502
Maharashtra	8,167	8,161
Jharkhand	6,391	5,944
Karnataka	4,527	4,517
Madhya Pradesh	3,819	3,617
Bihar	1,235	1,228
Uttar Pradesh	1,102	1,065
States with fewer federations	770	714
Total	**163,730**	**158,166**

Source: APMAS data, 2010

Whereas there were very few SHG federations (maybe less than 1,000) in India till 2000, a sudden spurt was seen during 2003–2010 because a large number of the SHG federations were promoted by the state governments of Andhra Pradesh, West Bengal and Orissa. The latest APMAS data (July 2010) reveal that the number of SHG federations in the country is 1,63,730; of these, 1,58,166 are at the primary level. The distribution of federations across the country is skewed. Of 1,63,730 total federations, little over 50 per cent federations are in South India and another 41 per cent are in East India. In fact, four states, viz., West Bengal, AP, Kerala and Tamil Nadu, account for about 80 per cent of the total federations, and West Bengal and Andhra Pradesh alone account for about 60 per cent—almost all of these being state government-promoted. SHG federations are particularly weak in West Bengal. Considerable institutional development work has been done in Andhra Pradesh, Kerala and Tamil Nadu, including the adopting of innovative strategies such as using community resource persons (CRPs—women who have been in SHGs for more than five years, have successfully come out of poverty with the support of the SHGs, have played a significant role in ensuring that their SHGs and federations have become a 'best practice' organization and are willing and able to go to other districts and states to strengthen the SHG movement) for institutional capacity building, providing 'seed capital' for SHG federations to engage in financial intermediation, and by recognizing them as agents for procuring agriculture produce. However, the PLFs being in very large numbers, as per the APMAS ratings analysis of the financial data of the federations, almost 50 per cent of these still require considerable improvement, in terms of governance, management and systems. Unless SHG federations perform the functions of being self-regulatory organizations (SROs), taking responsibility for internal controls, audit, elections and planning, the existing weaknesses cannot be completely addressed.

Table 1 indicates an uneven spread of the SHG federations, which corresponds to the spread of the SHGs in the country. With the launch of NRLM, by 2017, it is expected that there will be more than 10 million SHGs (just in rural India!) and almost 5,00,000 SHG federations in the country. There is a possibility of NRLM improving the quality of the existing SHGs; there will be much greater emphasis on organizing the unorganized, particularly the poorest of the poor, into the SHG system. Simultaneously, there will surely be a strong emphasis on federating SHGs at village and block levels, to channel NRLM benefits, undermining self-reliance.

With NRLM ready to kick start, there is a parallel effort by NABARD to revisit the SHG bank linkage model and come up with a new 'avatar' of the SHG model for the future, hopefully with greater emphasis on financial literacy, savings including voluntary savings, annual auditing of e-SHGs, innovating on bank loan products to SHGs and identifying a suitable role for SHG federations. To make bank linkages more effective, NABARD is likely to invest much greater effort in galvanizing the banking sector, through training and capacity building and other strategies.

Federations, like CBOs in other parts of the world, offer a number of services to SHGs and individual members, in the initial years. The whole range of services provided by federations could be grouped into four categories, viz., institutional development, financial intermediation, livelihoods and business development services, and social intermediation. SHG federations specialize as they mature and conditions change. Many

Financial Services	SHG Strengthening Services
◆ Credit	◆ Auditing
◆ Mandatory savings	◆ Grading (rating or assessing)
◆ Voluntary savings,	◆ Book-keeping
◆ Savings for health, education, etc	◆ Training and financial literacy
◆ Insurance	◆ Monitoring
◆ Pension savings	◆ Bank linkage and other linkages
◆ Housing loans	◆ Problem solving, leadership rotation
◆ Hire purchase	◆ New groups formation

Business Development Services	Social Initiatives
◆ Marketing services	◆ Domestic violence
◆ Processing and value addition	◆ Child marriage
◆ Business plan development	◆ Gender discrimination
◆ Promotion of entrepreneurship	◆ Child labour
◆ Enterprise financial management	◆ Social discrimination
◆ Livestock management	◆ Rights and entitlements
◆ Input supply	◆ Drinking water
◆ Bulk purchasing	◆ Health
	◆ Family counselling
	◆ Anti-liquor campaigns

federations in South India undertake financial intermediation using seed capital. (State governments provide grant funds to the SHG federations in the form of 'seed' capital. The SHG federations offer the funds as loans at reasonable interest rates to their member SHGs and recover the funds from the SHGs. The fund available to SHG federations is expected to grow over a period of time as it generates interest income. A part of the SHG federation profit is used for meeting the expenses of the federation, including staff salaries.) In some cases, federations were forced to take up financial intermediation, due to the apathy of bankers. Some federations have limited financial intermediation or business to earn sufficient funds to meet their operational costs. Some federation structures have clear role divisions for different layers of federations. In a few cases, separate institutional structures have been promoted to take up different sets of services. In India, about 50 per cent of the federations provide financial services.

Financial and Institutional Sustainability of SHG Federations

GoI and many of the NGOs that pioneered the SHG model estimated Rs 10,000 to 12,000 for promoting and sustaining one SHG over a period of five years. In 2010, Srinivasan and Thanka

(2010) conducted a study on the costs and sustainability of SHG federations engaged in financial intermediation. They estimated that the total cost of promoting an SHG federation, including the SHGs, is in the range of Rs 15,000 to 25,000 per SHG over a period of five years. Policy makers and promoters must carefully assess the costs and returns of promoting the SHG federation. Whereas federating SHGs at the village level seems to be justified and the associated costs may be lower, higher tier federations would be costly to promote and even costlier to sustain in the long run.

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The institutional sustainability of an SHG federation constitutes the ability of the federation to be self-governed, self-managed and self-reliant. Those SHG federations that become corporate bodies by registering under an appropriate legal form would have to also ensure that they are audited annual by a chartered accountant, prepare an annual report and present it in the annual general body meeting as well as file the report with the registrar of the respective registering authority. APMAS rating findings suggest that the SHG federations that have a weak SHG base tend to have governance deficit and high dependence on the promoter. Also, in government-promoted SHG federations, the system being largely top-down, there is limited space for women to govern, manage and regulate their own SHG federation system. Based on the SHG federation best practice study conducted by APMAS (2010), once an SHG federation is formed, the federation requires support for at least 3–5 years. After that, the federation should be able to manage its affairs.

Financial sustainability of a federation would imply its ability to meet its costs, which include staff honorarium, office rent, travel costs, cost of books, audit fee, interest to be paid on loans borrowed, interest to be paid on savings received from members and costs related to conducting monthly executive committee meetings and annual general body meeting. There are broadly three types of sources of funds for a SHG federation to meet its costs. These are: (a) membership fee and service fee, (b) interest income (mobilized only by those SHG federations that are involved in financial intermediation) on its corpus, which includes savings from their constituents, grants received and bulk loans borrowed from FIs and others for on-lending, (c) personnel support and recurring grants from promoters. Broadly, there are two types of federation promoters: government agencies and NGOs. Initially, the rural development, and women and child development departments were involved in the promotion of SHGs and federations in different states. Several international agencies such as IFAD, DFID, World Bank and CARE also played a significant role in providing funding and technical support in promoting SHGs and SHG federations. NABARD was also one of the important players. In recent years, specialized autonomous agencies are being established in many states by the state governments, to implement the national rural livelihoods programme (NRLP) in a mission mode, their predominant role being providing the sensitive support system for the SHG federation system promoted and nurtured by them. These autonomous societies are funded by the World Bank under NRLP and through the Ministry of Rural Development, GoI.

The institutional sustainability of an SHG federation constitutes the ability of the federation to be self-governed, self-managed and self-reliant.

APMAS ratings and assessments of SHG federations across India suggest that mature SHG federations, involved in financial intermediation, are both institutionally and financially sustainable. However, various policies of the central and state governments may affect NGO-promoted SHG federations engaged in financial intermediation. For instance, the AP MFI Regulation Bill (2010), which is strongly in favour of government-promoted and supported SHGs and SHG federations, adversely affected NGO-promoted SHG federations. Myrada's experience has shown that non-financial federations can also be institutionally and financially sustainable if the promoters have a long-term vision and provide effective mentoring and handholding support. Though Community Managed Resource Centres (CMRCs) promoted by Myrada, which are service providers to member SHGs and other user-groups with SHGs and other CBOs, strictly speaking, are not SHG federations, they have demonstrated that they can be self-sustaining by providing useful non-financial services to members for a fee. Many other SHG federations, either multipurpose or non-financial, are also recovering some of their operational costs through service fee. Some federations offer a wide range of services, acting as implementing agencies for government programmes. There are several federations that have been prudently cautious about what they take upon themselves and what they do not.

The SHG federation is recognized by RBI, NABARD, IRDA, GoI, state governments, NGOs and the corporate world as important people's institutions providing value-added services to their members. [The RBI circular on Business Facilitators (BFs) and Business Correspondents (BCs) recognizes SHG federations as institutions that can serve as BFs/BCs. GoI recognizes SHG federations as important institutional forms for promoting financial inclusion. State governments, the central government and NABARD recognize the SHG federations' role in strengthening existing SHGs and in promoting new SHGs (as SHPIs). Companies have signed agreements with SHG federations to work on procuring and marketing of agriculture produce and FMCG items.]

APMAS SHG federation best practice study (2010) suggests a near-unanimity on the need for SHG federations to provide non-financial services to members contributing to SHG sustainability. Registered SHG federations are already working as BFs of banks and, in some cases, as BCs in Andhra Pradesh and Tamil Nadu. However, there is divided opinion on federations performing a financial intermediation role. Irrespective of the divided opinion, almost 50 per cent of the SHG federations in India are engaged in some form of financial intermediation role when they manage the 'seed capital' given by state governments in Andhra Pradesh, Orissa and Tamil Nadu. Some of them term themselves as Community Based Microfinance Institutions (CBMFIs) and have been accessing bulk finance for on-lending. In fact, 17 SLFs *(mandal samakhyas)* in Andhra Pradesh have already got a bulk loan of Rs 5 million each from commercial banks. Some of the federations in Andhra Pradesh and other states call themselves *'mahila* banks' (women's banks). They have shown their willingness to develop performance standards, undertake self-rating and have also undergone rating by a third party, to access loans from FIs. Many financial federations have demonstrated both operational and financial self-sufficiency by covering their costs. They have also begun

to offer savings and insurance services to their members.

Evidence from existing data of the SHG federations suggests that they can become both institutionally and financially sustainable with robust systems and processes. To ensure sustainability of SHG federations as institutions of the poor, there is need to have a well-developed system of self-regulation and self-supervision, focusing on internal control, annual audit, annual elections, annual planning and, in SHG federations, conducting annual general body meetings effectively.

Some of the federations in Andhra Pradesh and other states call themselves 'mahila banks. They have shown their willingness to develop performance standards, undertake self-rating and have also undergone rating by a third party, to access loans from FIs.

Need for an Effective Third Party Rating System

APMAS has developed four types of tools for undertaking quality assessment of SHG federations: GRADES for rating an SHG federation involved in financial intermediation; Self Assessment Tool (SAT) for an SHG federation undertaking self-grading; Social Intermediation Tool (SIT) for assessing an SHG federation involved in social intermediation; Commitment Tool for SHGs of persons with disability. Using GRADES, APMAS has undertaken the rating of almost 500 SHG federations in India. The uniqueness of the rating tool developed by APMAS gives 40 per cent to the performance of the SHGs and the remaining 60 per cent for various aspects of the SHG federation performance. Other agencies have also developed rating tools to assess SHG federations.

Issues and Challenges

In recent years, SHG federations have become popular. Except for NABARD, most of the other stakeholders have accepted SHG federations as desirable both as social and financial intermediaries. The number of SHG federations being promoted in different parts of India is steadily growing and is likely

Table 2: SHG Federation Rating Tool–GRADES

Parameters	Total %	Qualitative Indicators		Quantitative Indicators	
		No.	%	No.	%
Governance	16%	5	14.0%	4	4.8%
Resources	6%	1	1.2%	5	8.6%
Asset Quality	10%	1	1.4%	0	0.0%
Design of Systems and implementation	10%	4	10.0%	5	12.0%
Efficiency and profitability	12%	0	0.0%	0	0.0%
Services to SHGs	6%	3	6.0%	3	3
Sub total	60%	14	32.6%	15	27.4%
SHG performance	40%	12	21.0%	11	19.0%
Grand total	**100%**	**26**	**53.6%**	**26**	**46.4%**

to reach saturation by 2020. With more and more number of federations being promoted through a top-down approach, there is fear among some of the stakeholders that the SHG federation system may go the way cooperatives have gone in India. Of course, the lessons learnt from the ongoing cooperative reform process must be integrated into the SHG federation promotional processes. Due consideration must be given for SHG federations to evolve at a pace at which women can trust their own institutions, take responsibility to manage them and exploit the full potential there is. Based on evidence from more than 15 years of experience of working with SHG federations, a strong argument in favour of SHG federations and evidence about their institutional and financial sustainability has been presented in the previous sections of this paper. However, the following are some of the major issues and challenges faced by a majority of SHG federations in India.

- A large number of SHG federation promoters have limited capacity and vision as to why they promote SHG federations and what the implications are.
- A national policy and strategy on SHG federations is absent.
- Barring in nine states, there is no suitable law for SHG federations to become body corporate. Even in these nine states, self-reliant cooperative laws are primarily meant for cooperatives and not for SHG federations.
- Banks are reluctant to open bank accounts for SHG federations or give bulk loans to the SHG federations. Bulk loans are only being given to SHG federations under government pressure.
- Limited work has been done on federations offering a variety of savings products to meet the savings needs of members. For SHG federations to have much greater ownership among members, their savings and share capital are very important. Their commitment to SHG federations is directly proportionate to their stake in the institution.
- A well-developed and accepted system of self-rating and third-party rating is needed for SHG federations, particularly those involved in financial intermediation, to become strong, vibrant and sustainable.
- There is urgent need for a self-regulation system for the SHG movement.
- If SHG federations do not add value, they should not be promoted. Experience suggests that multi-purpose federations are not effective and sustainable in the long-run. In the initial years, federations can be multi-purpose and unregistered. In the medium to long-term, SHG federations must be single-purpose organizations registered under an appropriate legal form such as self-reliant cooperative laws, for example, the AP Mutually Aided Cooperative Societies (AP MACS) Act 1995.

CONCLUSION

SHG federations have evolved as an institutional base, providing sustainability to the SHG sector and of significant scale and widespread acceptance. Though not a panacea, there is great potential for the SHG federation model, to address poverty by serving as a platform for providing financial and livelihood promotion services. In many ways, the model is unique—the women are the owners, managers, users

and beneficiaries. The SHG federation model is here to stay and will be significantly strengthened under NRLM because there will be significant investments, both financial and human, in making the SHG federation institutional architecture a strong mechanism to serve members. Whereas there are many benefits of the SHG federation system, it has several limitations. There is need to focus on financial literacy, voluntary savings and institutional capacity building. Developing the village-level SHG federation (village organization) as a strong institution that takes responsibility of 15–30 SHGs in that village by playing a strong social intermediation role and, where necessary, being the 'bridge' financing agency within the reach of the SHGs and their members, is most needed. The systems of auditing, elections, planning and rating must be introduced and all the SHGs must follow these. At the least, SHG federations can play a strong service role in support of their member SHGs by providing training, rating, auditing and facilitating linkages. A separate legal form at the state/national level for the SHG federations would be a great enabler.

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There is distinct possibility of SHG federations promoting their own microfinance institutions or 'SHG banks' to serve the supplementary financial needs of SHG members. Some of the SHG federations are already playing a financial intermediation role, though not as effectively as one would expect them to be. Specialized SHG banks at the district level or for a cluster of districts would be interesting to explore. To meet the ever growing financial needs of the SHG members, several innovations are needed, including using smart card and mobile phone technologies. Mature SHG members could become direct individual borrowers of the banks with SHG/federation recommendations.

A national alliance to support community based microfinance is needed to advocate for the sustainability of the SHG system. Though it is a challenging task to sustain a large number of SHG federations, it can and must be done. What is necessary is a synergetic effort by policy makers, planners and implementers. There is also need for public-private partnership to make it a reality.

The SHG Sector in India: Toward Self-reliance and Sustainability

HANS DIETER SEIBEL

Building the capacity of selected SHG members to manage and govern village organizations as well as higher-level federations is feasible as demonstrated by the Sector Own Control pilot in Andhra Pradesh

THE EVOLUTION OF SHG BANKING

There are three sectors of financial institutions (FIs) in India that provide services to lower-income people: regulated banks, unregulated microfinance institutions (MFIs) and informal self-help groups (SHGs). India has one of the most diversified networks of banks in the developing world, comprising commercial banks, regional rural banks and co-operative banks; these, in turn, are linked to some 1,00,000 agricultural co-operatives (PACS) with credit as their principal service to farmer members. Yet, according to the All-India Debt and Investment Survey of 1981, some 250 million of the rural poor still had no access to formal finance, despite years of massive branch expansion, priority credit programmes for the rural areas and numerous donor credit lines. The National Bank for Agriculture and Rural Development (NABARD), carved out of Central Bank in 1982, analyzed the reasons behind the failure of banking services to reach the rural poor. The main causes were found to be: a singular emphasis on production loans, prohibitive transaction costs for lenders and borrowers, a failure to mobilize savings and the overly complicated procedures.

During the second half of the 1980s, NABARD changed its policy from the old world of supply-driven to a new world of demand-driven finance, stipulating that programmes with the poor have to be savings-led and not credit-driven; and that the poor have to have a say in their design. Inspired by a new regional programme—Linking Banks and Self-help Groups (SHGs) — of APRACA (Asia Pacific Rural and Agricultural Association) and GTZ/GIZ in Asia, NABARD initiated a study of SHGs in 1987, led by MYRADA, based on a new paradigm: *Savings first.* Three options were explored, all hinging on prior savings by the groups: matching grants, matching interest-free loans or bank loans with interest. In a parliamentary debate, NABARD argued against the introduction of the Grameen Bank model of Bangladesh on a national scale, opting instead for a *linkage banking approach,* that is, using the existing infrastructure of banks and social organizations; being savings-driven rather than credit-led; and using bank rather than donor resources in the provision of credit.

With approval from the RBI and an authorization for banks to open savings accounts for informal SHGs, NABARD started a pilot project in 1992, contributing to solving the perennial problem of rural indebtedness and poverty in India. The results were promising, and NABARD decided to mainstream SHG banking on a national scale—setting up a Credit and Financial Services Fund in 1996 for extensive capacity-building and a Micro Credit Innovations Department (MCID) for

programme implementation in 1998, with MCI cells in every state. Transaction cost studies in 2002 found that the SHG banking was highly profitable to banks, and borrower transaction costs were low for SHGs as well as members.

India has one of the most diversified networks of banks in the developing world, comprising commercial banks, regional rural banks and co-operative banks

Since then, the number of SHGs established by NGOs as well as government organizations (GOs) and banks has grown at a tremendous speed. The rapid growth in outreach has been made possible by drawing on a wide array of institutional resources as India's *social capital*—NABARD being the prime mover and refinancing agency; the formal financial sector providing deposit services and credit; NGOs and GOs with experience in group development as facilitators; the RBI, which adjusted the policy framework for banking relations with informal groups; and the political leadership at the union and the state levels. At the same time, the programme has drawn on India's *human capital,* that is, the competence and enthusiasm of the staff in participating agencies; and the willingness of people from the lowest classes to form a group, meet regularly, pool their miniscule savings, lend to members, and establish a documented track record of financial intermediation. On that basis, the groups are then permitted as informal entities to open bank accounts and obtain bank loans, lend to their members on terms autonomously decided by each group. In India, small groups with financial activities attract predominantly women, even if no such bias is built into the programme design; over 90 per cent of the group members are women. Neither social nor human capital would suffice, were it not for the *financial capital* created by the programme—steadily increasing internal resources of the groups, generated through savings and profits from interest income; high profitability of SHG banking as a financial product of the banks (higher than other rural financial products); and bank refinancing by NABARD.

As reported by NABARD at the Micro-finance Summit 2011, as of 31 March 2011, 7.5 million SHGs had opened savings accounts in banks, with an outreach to some 100 million members (the average group size seems to have dropped from around 15 to somewhere above 13), covering a population of around half a billion; the total bank deposits amounted to Rs 69.26 billion ($1525 million). At the same time, 4.81 million SHGs had outstanding bank loans amounting to Rs 306.27 billion ($6,787 million). However, as impressive as these figures are (doubted by some as to their validity), outreach across the states is very uneven and the suitability of the SHG banking for thinly populated and remote areas has been questioned. The depth of financial services is not very much: an average Rs 9,177 ($204) in bank deposits per SHG, or around Rs 700 ($15) per member and Rs 63,625 ($1418) in outstanding bank loans per SHG, or around Rs 4,850 ($108) per member. The internal resources of SHGs (comprising mandatory savings and profits) are a multiple of their bank deposits, serving as an additional source of 'loan-able' funds. Andhra Pradesh is regarded as the leading state in the development of the SHG movement, accounting for a disproportionate share of outreach in India: 18 per cent of the SHGs with bank savings accounts and 16 per cent of the aggregate amount, 35 per cent of the SHGs with bank loans outstanding and 42 per cent of the outstanding bank loan balance (Table 1). The Society for Elimination of Rural Poverty (SERP), with its World Bank-supported SHG project, Indira Kranthi Patham (IKP),

has greatly contributed to this achievement.

NABARD has focussed on the quantitative growth of the outreach and on credit linkages of SHGs. It has also provided funds for capacity building of promoting NGOs, government organizations and banks; but the group quality and operations have been left to the promoters. As a result, there is no standardized book-keeping and auditing system; the internal financial intermediation of SHGs is not monitored and consolidated; the financial operations of SHGs are not supervized, neither directly nor indirectly. Contact with bank branches may have given SHG members an opportunity to open individual bank accounts but their number is limited, and not systematically promoted. There is anecdotal evidence of members establishing micro-enterprises and some even growing into small enterprises; but SHG banking has not included promoting graduation to micro- and small-enterprise finance.

With approval from the RBI and an authorization for banks to open savings accounts for informal SHGs, NABARD started a pilot project in 1992, contributing to solving the perennial problem of rural indebtedness and poverty in India.

THE DEVELOPMENT OF SHG FEDERATIONS

Building informal groups without the concept of supporting secondary and tertiary structures of SHGs has had one major consequence, unintended by the NABARD: others took the building of such structures into their own hands, among them NGOs and state governments. NABARD did not involve itself in supporting such structures until 2007. As Srinivasan & Tankha (2010: 199) put it, "NABARD does not view the financial intermediation role of federations favourably and is willing to accept the same only as an unavoidable necessity where it could be done with profitability and sustainability."

Among the earliest initiatives were by CARE India and Dhan Foundation in the early 1990s and UNDP's South Asia Poverty Alleviation Project (SAPAP) in 1996 in Andhra Pradesh, up-scaled during the 2000s by SERP of the Government of Andhra Pradesh in its Velugu/ IKP project with World Bank support. In Kerala, the state government promoted federations state-wide through the Kudumbashree programme. In Tamil Nadu, the government promoted primary federations throughout the state through its Mahalir Thittam (MT) project; similarly, so has the Government of Maharashtra. PRADAN, MYRADA, DHAN and CARE are among the NGOs pioneering SHG federations in several states. Overall, the results of the efforts towards building a wider institutional framework have been stunning. As of March 2010, there were a

Table 1: SHG Bank Linkages in India and Andhra Pradesh, 2011 (in Bn Rs)

Parameters	India	Andhra Pradesh	AP in % of All-India
SHGs with bank savings accounts	7,547,269	1,351,330	17.9
Bank savings balance	69.26	10.89	15.7
SHGs with bank loans outstanding	4,813,670	1,683,993	35.0
Amount of bank loans outstanding	306.27	128.69	42.0

total of 1,63,730 federations (138 per cent more than in 2007), comprising 1,58,166 primary level Community Based Organizations (CBOs) or Village Organizations, VOs, (96.6 per cent), 5,465 secondary level (3.3 per cent) and 100 tertiary level federations (0.1 per cent). In 11 states, there are more than 1,000 federations, the largest numbers in West Bengal (51,354) and Andhra Pradesh (45,752); there are seven states without any federations (Table 2).

There is no harmonized system, either in terms of legal forms or of functions. Federations have been registered under different legal forms, most prominently under parallel liberal co-operative laws similar to the Mutually Aided Co-operative Societies (MACS) Act of 1995 in Andhra Pradesh. They may function as support organizations, including capacity building and monitoring and supervision, as well as facilitators of the flow of credit from banks and other sources and financial apexes. After 20 years of SHG development, one may ask: "What is going to be the fate of SHGs in the next 20 years? Will they remain informal? What will be the

Andhra Pradesh is regarded as the leading state in the development of the SHG movement, accounting for a disproportionate share of outreach in India: 18 per cent of the SHGs with bank savings accounts and 16 per cent of the aggregate amount, 35 per cent of the SHGs with bank loans outstanding and 42 per cent of the outstanding bank loan balance

Table 2: State SHG VOs and the Higher-level Federations, 2010

State	Total No. of Federations	VOs	VOs in % of total number
West Bengal	51,354	49,433	96.3
Andhra Pradesh	45,752	44,502	97.3
Kerala	18,101	17,040	94.1
Tamil Nadu	13,617	13,443	98.7
Orissa	8,895	8,502	95.6
Maharashtra	8,167	8,161	99.9
Jharkhand	6,391	5,944	93.0
Karnataka	4,527	4,517	99.8
Madhya Pradesh	3,819	3,617	94.7
Bihar	1,235	1,228	99.4
Uttar Pradesh	1,102	1,065	96.6
6 states with 33–351 federations			
5 states with 1–7 federations			
7 states with 0 Federations			
Total	**163,730**	**158,166**	**96.6**

Source: ***Micro-finance India: State of the Sector Report 2010*** **by N. Srinivasan**

role of SHG VOs and higher-level federations? Might there be a role for SHG federations in meeting the loan fund gap during the time period that SHGs have an active loan from a bank?"

The registration of federations under the MACS Act is a major achievement because it removes them from direct domination and shareholding by the government and places them under their own by-laws,

The role of Sector Own Control (SOC) in Andhra Pradesh

Andhra Pradesh has been a leading state in the evolution of a comprehensive system of SHG federations. These cover the whole state and are registered as autonomous MACS under the Act of 1995. As of December 2011, there were 38,300 primary level federations at the village level, 1,099 at the sub-district level and 22 at the district level, covering about a million SHGs in all. Virtually, all of them are registered as MACS, except eight per cent of the VOs, which are in the process of registration. (Table 3)

The registration of federations under the MACS Act is a major achievement because it removes them from direct domination and shareholding by the government and places them under their own by-laws, stipulating board meetings at least monthly; general body meetings (GBMs) within a period of six months from the close of the financial year; elections in the manner specified in the by-laws of the federations; audit of accounts by a chartered accountant (in addition to internal audits), submitted to the GBMs of federations for approval; filing of returns annually before the statutory authorities, within 30 days from the date of the annual general body meeting.

In 2007, the Registrar of Co-operatives determined that the enforcement of legal compliance of federations with the AP MACS Act does fall under his responsibility. Yet, the scrutiny of the Registrar does not go beyond ascertaining receipt of the required reports; there is no over-seeing of financial or non-financial performance. However, the enforcement of compliance with the MACS Act had two major effects. First, it has compelled almost 40,000 SHG federations to have their books audited and hold the required GBMs, where the results of the audits (including the discovery of fraud and other inconsistencies in the books) are presented. Second, it has motivated federations, together with SERP as a promoting agency, to impose the same requirements via by-laws on the SHGs and to control compliance, even though such compliance cannot legally be enforced among informal organizations.

The enforcement of compliance has underlined the urgency of (i) regular and reliable book-keeping and auditing among the 1.5 million SHGs in Andhra Pradesh, requiring the training and supervision of large numbers of book-keepers and auditors; and (ii) the importance of regular elections and meetings, requiring member education and financial literacy training to disseminate familiarity with

Table 3: Registration of SHG Federations under MACS Act in Rural Andhra Pradesh, 2011

SHG Federations	Number	MACS
District – Zilla Samakhya	22	100%
Sub-district – Mandal Samakhya	1,099	100%
Village Organizations	38,300	92%

rules and regulations, roles and responsibilities.

This corresponds to the concerns of the SHGs identified by APMAS and the IKP team together with the representatives of SHGs and their federations in Andhra Pradesh.

Internal funds: Low levels of savings; no interest paid on (mandatory) member savings; reluctance to increase regular savings; tendency of distributing accumulated surplus among members; idle internal funds due to restrictions imposed by banks.

The interaction between APMAS and SERP/IKP with SHGs and their federations led to the decision of piloting self-regulation and self-supervision of the SHG system, or SHG SOC, with the overall objective of ensuring that SHG members set their agenda and manage and control the processes, so that the SHG system works effectively and sustainably for their benefit.

External loans: Shift of focus from internal lending to external loan channelling; inadequate access to loans of appropriate size and timing.

Systems and processes: Inadequate operational capacities of SHGs and federations; lack of information processing and feedback by federations; inadequate and uncontrolled record-keeping, leading to mis-management and fraud.

SOC: DESIGN AND APPROACH

The interaction between APMAS and SERP/IKP with SHGs and their federations led to the decision of piloting self-regulation and self-supervision of the SHG system, or SHG SOC, with the overall objective of ensuring that SHG members set their agenda and manage and control the processes, so that the SHG system works effectively and sustainably for their benefit. A three-pronged strategy has been tried and tested: (i) identification and training of eligible members of SHGs as internal service providers (book-keepers, auditors, facilitators, trainers) and as office bearers; (ii) compensation of internal service providers by SHGs from their own income as a basis of financial self-reliance and institutional sustainability; (iii) management and control of the system of training and compensation by a tiered structure of federations, which are in turn staffed and self-managed by elected representatives of the respective lower tier (VOs by representatives of SHGs, sub-district/*Samakhya* federations by representatives of VOs, district/*Zila* federations by representatives of the sub-district federations); along the same lines, the tiered structure is self-financed from below.

The project holder has been APMAS, an NGO domiciled in Hyderabad, which is focussed on quality assurance for an envisioned 'Sustainable Self-Help Movement in India'. Established in 2001, APMAS has done pioneering work in developing various capacity building modules, rating tools and innovative approaches to strengthen the SHG movement. The German Co-operative and Raiffeisen Confederation (DGRV), a national auditing federation backed by a history of emerging self-control and supervision of savings and credit co-operatives since the middle of the 19th century in Germany, has provided capacity building and technical assistance to the pilot project, 2008–11. SERP is APMAS' senior partner in promoting SHG federations and up-scaling SOC throughout the state. SERP is an autonomous society established by the Department of Rural Development of the Government of Andhra Pradesh and chaired by the Chief Minister of Andhra Pradesh. It implements the IKP, a state-wide project

funded by the World Bank promoting SHGs and SHG federations as the foundation for poverty reduction. APMAS's main instrument of collaboration with SERP is capacity building of its staff and management and piloting innovative approaches such as SOC, to promote self-reliance and sustainability of the SHG movement in Andhra Pradesh. In a similar vein, APMAS also works with the Mission for the Elimination of Poverty in the Municipal Areas (MEPMA) of Andhra Pradesh.

The pilot project area is the Kamareddy cluster in Nizamabad district, Andhra Pradesh, comprising 128 villages. The cluster comprises six sub-districts, or *mandals,* each with its own SHG federation *(Mandal Samakhya, MS);* these are multi-service federations, each with a staff of six to nine, half of them paid by IKP and the other half from the own income of the federations. The federations in the cluster are co-members and co-owners of the district-level federation *(Zilla Samakhya).* Since February 2011, they are under a cluster supervisory federation, *Paryavekshka Samakhya*—the result of institutionalizing the pilot project co-ordination committee. The six *mandal*-level federations comprise 172 primary federations, or VOs, an average of 1.3 per village and 30 per *mandal.* Each VO comprises on an average 35 SHGs: a total of initially 4,408 and now 6,084 SHGs in the cluster, all ranging from one to seventeen years old, as of March 2010. The total number of members is 75,000, ranging from five to 19 and averaging 12 per SHG. The members of the SHGs are all women, comprising poor and the poorest of the poor (PoP), as defined by the government. Of the total number of 34,762 PoP households in the cluster, 99.5 per cent are members of the SHGs.

The implementation process proceeded along the following lines: (i) designing and testing the capacity building modules and methodologies in the Kamareddy cluster (starting with a pre-pilot in 2007, supported by InWEnt); (ii) joint strategic planning and promotion of SOC with SERP/IKP, with technical assistance from DGRV; (iii) capacity building of IKP staff and, on a limited scale, of MEPMA staff through training of trainers (ToT) for implementation throughout Andhra Pradesh; dissemination of the pilot experience and the SOC approach among diverse stakeholders, including NABARD, GoI and NRLM (2011).

The support activities under SOC are result-oriented and comprise two steps: (i) establishing a co-operative SOC system, comprising standardized book-keeping, reporting, auditing, rating, annual planning and monitoring; systematic annual elections (by secret ballot); legal compliance as per the MACS Act at all federation levels and similarly in SHGs; delegation of representatives from the lowest (that is, the SHG) level to all federation levels; and (ii) capacity building as the social capital formation process by which the SOC system is inculcated in the minds and practices of SHG members and SHG representatives and office bearers in federations, selecting all trainees (book-keepers, resource book-keepers, auditors, supervisors, financial literacy facilitators) from within SHGs and building their capacity as internal service providers. The main lines of the implementation process are presented in Figure 1.

At a different level of capacity building, this process model, comprising the establishment of an SOC system and its inculcation in the participants, is transmitted to replicators for up-scaling, such as SERP and MEPMA at the state level and others at the national level; elements of it may also be incorporated in the ongoing reform of the co-operative sector under NABARD.

RESULTS IN KAMAREDDY CLUSTER

APMAS has tested and published a complete set of capacity building materials in 18 modules in English and Telugu, covering all basic aspects of SOC; some are also in Gujarati, Bengali, Hindi, Marathi and Kannada. Whereas qualitative responses are difficult to measure, the figures of outreach and effective participation speak a language of their own. Table 4 reports the results of establishing a system of GBMs, elections, auditing and reporting at the federation levels. The coverage is comprehensive: all the MSs and the VOs hold annual meetings and elections, and submit printed annual reports as required by their by-laws, and all the MSs and all but

Figure 1: Field Implementation Process

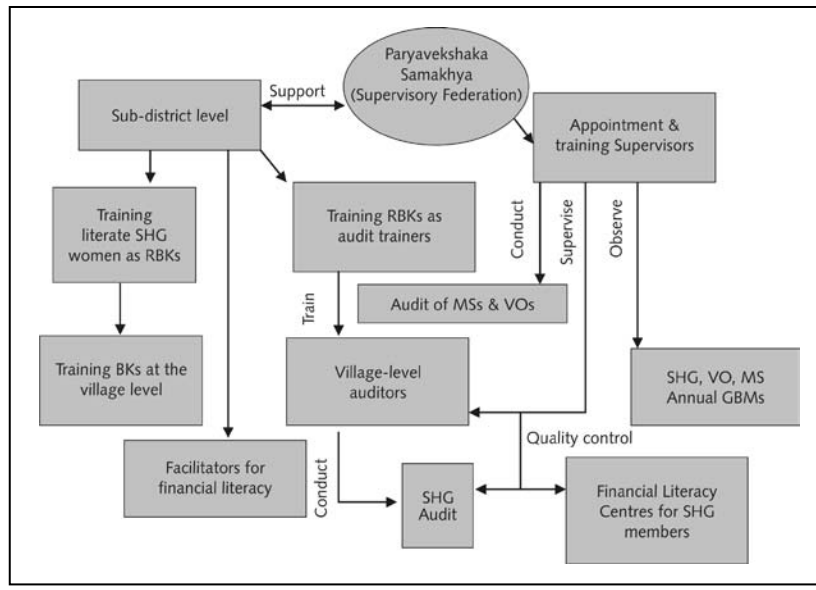


Table 4: Results at the Federation Level in Kamareddy Cluster, December 2011

GBMs of VOs and MSs completed as per by-laws	All 172 VOs and 6 MSs
Elections conducted regularly as per by-laws	All 172 VOs and 6 MSs
Annual reports printed and submitted to the GBMs	All 172 VOs and 6 MSs
SHGs internally audited by community auditors	4738 out of 6,084 SHGs
Per cent of SHGs found in loss[1] (as of March 2010)	31%
Second audit conducted	1190 SHGs
VOs regularly audited by chartered accountants	172 out of 178 (6 unregistered)
VOs audited internally	172 out of 178
MSs regularly audited by chartered accountants	All 6

[1]Losses were found to be mainly due to lower interest income from internal loans, as a result of inadequate margins.

Table 5: Results at the SHG level in Kamareddy Cluster, December 2011

	Number of SHGs	Per cent: of Total 6,084 SHGs
Internal savings of SHGs monitored	5,958	98
GBMs	4,836	80
SHG annual planning	3,927	65
SHG-level election process	3,225	53
Interest paid on members' savings	4,056	67
Financial literacy training sessions	5,171	85
SHGs with book-keeping by trained book-keepers	4,758	78
SHGs audited (by 201 community auditors)	4738	78

one VO are regularly audited by chartered accountants. Within the framework of SOC, it is the task of federations to organize and supervize the process of GBMs and elections of SHGs as well as book-keeping and auditing. This requires adequate social capital, which is developed through capacity building (see Table 6). All this takes time; it is not to be expected that coverage of the total number of SHGs is attained during the pilot project period. Table 5 presents the results of establishing the foundations of an SOC system at the SHG level: the number of SHGs covered and the percentage out of a total of 6,084 SHGs in the cluster. At 98 per cent, the coverage of book-keeping is most impressive.

Table 6 reports the direct results of capacity building, in terms of persons trained for various functions required in a self-reliant SOC, particularly book-keeping, auditing and financial literacy.

Table 6: Capacity building: Persons Trained (Social Capital Formed)

Function	Number
SHG resource book-keepers	195 *
SHG book-keepers (target: one for every three SHGs)	1,564
Community auditors for the SHG audits	201
Audit trainers	17
Audit supervisors at *Paryavekshaka Samakhya* level	6
Audit sub-committee members at the VO and the MS level	62
Community resource persons	125
VO book-keepers	192
Financial literacy facilitators	240

*195 trained, currently using the services of 60 RBKs (135 employed by IKP).

Achievements: With technical assistance from DGRV, the SHG SOC pilot project in Andhra Pradesh, designed and implemented by APMAS, has attained the following objectives.

- Developing and testing systems and processes of the SHG SOC in the Kamareddy cluster as a pilot, in the framework of the national SHG Banking Programme of NABARD
- Gaining from inception the approval and partnership of SERP/IKP, a state-wide outreach to the SHG federation system, with a mandate of poverty alleviation and women's empowerment
- Developing the required modular training material in English and Telugu and translating core material into five other Indian languages
- Building the capacity of women selected from SHGs as book-keepers and auditors to implement the book-keeping and financial reporting of SHGs and federations
- Building the capacity of women to manage, govern and control their SHGs
- Promoting the capacity of women selected from SHGs as representatives and office bearers to manage, govern and control the federation system
- Improving financial literacy among SHG members
- Targeting the very poor effectively
- Installing systems of annual assembly meetings of SHGs and federations, including elections by secret ballot and annual planning
- Ensuring legal compliance as per the MACS Act
- Improving transparency and accountability at all levels
- Establishing shareholding ownership of federations by SHGs
- Installing self-financing through savings and retained earnings from loans and services at all levels
- Aiming at promoting growth of funds and profitability of SHGs and federations, addressing the contradictory challenges of smart support and non-smart subsidy policies of the government
- Documenting systems and processes adopted in the pilot for dissemination
- Providing exposure visits and training programmes to potential adopters of the SOC approach
- Building the capacity of SERP/IKP to implement the SOC system throughout Andhra Pradesh
- Collaborating with the ENABLE (empowering persons with disability) network members and other governmental and non-governmental agencies in adopting the SHG/SOC approach in other Indian states
- Communicating with NABARD and GIZ about the potential of disseminating SOC strategies
- Integrating elements of the SHG/SOC approach in the government's new national poverty alleviation programme, NRLM, launched in June 2011

Risks: The SHG/SOC approach is emerging as a strategic component in government programmes of poverty alleviation and women's empowerment at state and national levels. Given the incipient success of the pilot project and the support rendered to

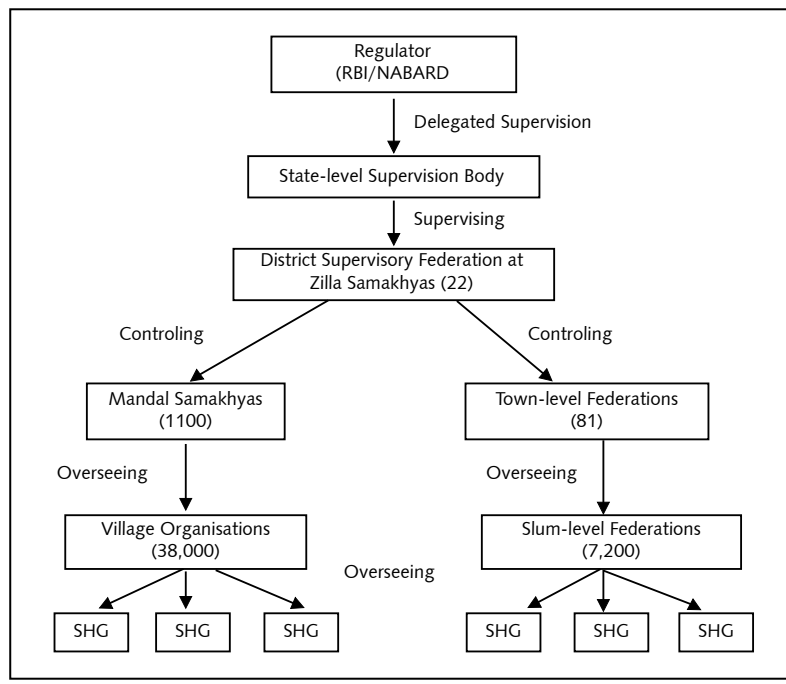
SHGs and SHG federations from many sides, APMAS, together with its stakeholders, cannot ignore a fundamental question: Whose agenda will SHGs and SHG federations carry forward—their own agenda or that of the state? Just like the century-old (state-aided) credit co-operative system in India, the new (*mutually* aided) SHG federation system with its concern for SOC faces the risks embedded in the contradiction between principles of institutional autonomy and self-help, and government support and subsidies. Much can be learned from the German system of co-operative self-help gained over a period of more than 150 years and similar experiences of other countries.

THE WAY FORWARD: MAINSTREAMING SHG/SOC IN ANDHRA PRADESH

SOC, as discussed at wrap-up sessions, aims at establishing a fully self-controlled sustainable SHG federation system in Andhra Pradesh, with its financial component institutions under (delegated) supervision recognized by the RBI. This would include four components: (i) up-scaling the SHG SOC approach throughout Andhra Pradesh, with continual enhancement of autonomy and effective self-control at all levels; (ii) completing the SOC structure by establishing an SHG federation at the state level; (iii) establishing a co-operative apex bank of the SHG federation system (accomplished as of end-2011); (iv) establishing a system of regulation and (delegated) supervision for the SHG federation system recognized by the RBI, as presented in Figure 2.

Partners in the process of mainstreaming SOC in Andhra Pradesh include SERP/IKP for rural areas, MEPMA for urban areas, NABARD for bank participants and as a representative of the RBI as the national financial sector regulator and supervisor, and the Registrar of Co-operatives for regulation and supervision of MACS compliance at the state level.

Figure 2: Regulation and Supervision of SHG Federations in Andhra Pradesh



WIDER RELEVANCE OF SOC FOR INCLUSIVE FINANCE

SOC, implemented by SHG federations, can provide a sustainable organizational framework on a legal (MACS and similar) basis for informal groups nationwide. Core functions are self-organized promotion, capacity building, self-regulation and self-supervision, including monitoring and reporting of internal financial inter-mediation of SHGs and advocacy. SHG VOs, as primary level federations, have emerged at the centre of the SHG system, close to 1,60,000 in number, accounting for 97 per cent of all federations. They are owned, financed, managed and governed by SHGs as shareholders. SHG VOs are the evolving 'mother organization' of SHGs and perhaps of specialized livelihoods groups/ organizations, with the potential of service delivery convergence as envisaged by NRLM (2011). The key functions include:

- Intermediation between SHGs and second-tier federations
- Monitoring, supervising and grading SHGs as grass-roots financial intermediaries
- Control over multiple borrowings of SHG members, serving as a village credit bureau
- Financial literacy training for SHG members
- Evolving a village-level financial intermediation (village bank)

The provision of village-level financial services is of greatest concern to the government. Banks have not provided such services in the past and it takes great optimism to believe they might do so in the future, as directed by the government. Also, agency banking services, as in the case of pygmy deposit schemes and recently among several MFIs, have not fared well in India. So far there is no convincing evidence that Banking Correspondents will fill the void.

In all likelihood, there is no single best solution; but SHG VOs, existing in large numbers and expanding rapidly, might emerge as one of the newly competing village-level financial intermediaries. Most importantly, as mutually aided co-operative societies under the MACS and similar Acts, they are authorized to mobilize voluntary withdraw-able savings, in addition to providing credit; in fact, they may be the only trusted organization in sight, which might do so at low depositor transaction costs. The evolving spectrum of financial functions and services may include the following:

- Voluntary withdraw-able savings of SHG members
- Working with SHGs as collectors of deposits and repayments
- Liquidity exchange between SHGs within a village
- Refinancing SHGs in co-operation with banks and other providers
- Providing individual loans to enterprising SHG members (with soft collateral)
- Facilitating individual bank lending to enterprising SHG members
- Managing insurance (life, health, pension), at present handled with difficulty by SHGs
- Product innovation
- Evolving division of tasks and responsibilities between SHGs and VOs.

Higher-tier federations at the sub-district and district levels will provide a back-up structure

for VOs, potentially with the following functions:

- Implementing SOC
- Monitoring and supervising VOs
- Communication with banks, NABARD, NRLM, state government and other stakeholders
- Implementing capacity building for SHGs and VOs
- Back-up facilitation of lines of credit, insurance, other services and programmes
- Advocacy regarding a conducive framework
- Advocacy regarding smart subsidies (geared to institution building)

The SOC pilot in Andhra Pradesh has demonstrated, in principle, that building the capacity of selected SHG members to manage and govern VOs as well as higher-level federations is feasible. As a next step, research across several states is needed, examining the experience and capacity of VOs as the emerging 'mother organization' of SHGs, with the potential of service delivery convergence as envisaged by NRLM. The possibility should also be explored whether, in states with very low SHG penetration, the establishment of self-managed VOs might be a first step for savings mobilization and bank linkages, as has been the case in many countries. The proposed research is expected to contribute to the objective of establishing a self-reliant, self-regulated and self-supervised system of SHGs and SHG federations owned, managed and governed by the poor—as the poor's own micro-finance organizations. This in turn is to contribute to the development goal of inclusive access of all, including the very poor, to a full range of adequate financial services for improved livelihoods in rural areas.

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This article was first published in The Micro-Finance Review, *Vol. IV, No-1 (Jan-Jun 2012), Journal of the Centre for Micro-finance Research,* published by Bankers Institute of Rural Development (BIRD), Lucknow, India

Poverty, Access to Credit and Absorption of Income Shocks: Evidence from SHGs in India

TIMOTHEE DEMONT

Studying the role of SHGs in helping the poor cope with climatic shocks, this article analyses the strength of informal microfinance groups in absorbing adverse shocks

INTRODUCTION

It is well documented that poor households in rural areas of developing countries often experience extremely variable incomes because of the combined effect of a large exposure to climatic, economic and policy shocks and a lack of appropriate insurance devices. Coping with climatic shocks, in particular, is becoming ever more crucial, given that climate change is expected to result in warmer temperatures as well as increasingly irregular and extreme precipitation patterns, with severe consequences for rain-fed agriculture in developing countries. In India, agriculture, which employs more than 60 per cent of the population, is extremely dependent on erratic monsoon precipitation, especially given that only a small fraction of land used for agriculture is irrigated. For instance, around 90 per cent of variation in Indian crop-production levels is due to rainfall volatility. Using macro data from 1951 to 2003, despite substantial decreases in the contribution of agriculture to the Indian GDP, severe droughts have resulted in decreases between 2 and 5 per cent of the GDP throughout the period. Rainfall shocks have been documented to affect agricultural profits, wages and ultimately the welfare of rural households significantly. Informal risk-sharing arrangements with neighbours, friends or family have often been shown to be largely imperfect in smoothing income shocks. This is especially true for rainfall variation, because a bad monsoon affects virtually every household in a local rural geographic area.

In this paper, long-term panel data measuring the evolution of living standards of SHG member households in rural India have been analysed to (i) quantify the impact of climatic shocks on different aspects of the welfare of households and (ii) measure the role of informal village microfinance groups to insure their members. The original panel household database about members of Self-Help Groups (SHGs) and meteorological data have been used to quantify and characterize the differential reaction of member and non-member households in the face of rainfall shocks. Given that most households in the sample depend principally on the cultivation of rain-fed rice, rainfall variation is expected to be an important determinant of the transitory swings in consumption and income. Although average rainfall is predictably different from place to place, the deviation of each year's rainfall from its local mean is unpredictable. On the other hand, SHGs present very interesting characteristics, combining savings, credit and linkages with formal banks, which open the possibility of helping members absorb adverse shocks, even when those are largely covariate. Farmers in Jharkhand, it is found, are extremely vulnerable to shocks in the monsoon intensity. Rice yields can decrease by more than 50 per cent following a monsoon that is one standard deviation below average. This

Poor households in rural areas of developing countries often experience extremely variable incomes because of the combined effect of a large exposure to climatic, economic and policy shocks and a lack of appropriate insurance devices

is particularly dramatic because the farmers in the sample as more than 50 million households in India rely on rain-fed rice as the principal source of caloric intake and income. Microfinance members are no different from other households as far as the vulnerability of rice production is concerned. Further, given that the traditional sources of credit are relatives, bigger farmers or small business persons from the same community, credit access virtually dries up for non-members after a bad shock. By contrast, SHG members enjoy a steady access to credit, and are even able to borrow more than average during the bottleneck period one year after a bad monsoon. This is made possible thanks to the large pool of savings of SHGs, which collect 'regular' weekly savings from their members, and to their linkage with formal banks.

Although any direct consumption smoothing because of a timing issue could not be measured, this counter-cyclical borrowing helps SHG members absorb rain shocks over the year. However, the design of the SHG system does not allow much of inter-year smoothing, which is likely to limit the insurance power of SHGs. Finally, some evidence that SHG credit allows some investment towards the diversification of the crop mix is presented. In particular, the study shows that SHG members progressively decrease their reliance on rice and increase the relative share of vegetables, which are shown to help to smooth agricultural income. The study analyzes long-term household data to quantify the direct impact of objectively measured, exogenous shocks.

SHOCKS, 'CONSUMPTION SMOOTHING' AND THE ROLE OF MICROFINANCE

In the face of transitory income shocks, households are expected to (try to) smooth con¬sumption for different reasons. First, individuals have relatively stable preferences over time and, therefore, prefer to maintain consistent levels of consumption if they can. Second, most households are risk averse, especially if they are poor (because they are close to the survival point). Third, relatively wide variations in expenditure can be extremely harmful, especially if one lives close to the subsistence level. Within a village, though part of the risk is common to all families, another important part is specific to the circumstances of specific households (someone's cattle may die; people have more or less land with different characteristics, etc.).

Whether households are actually able to smooth consumption or not depends on the context (institutional, informational, social, economic or personal). The empirical literature on the effects on income shocks on household in developing countries provides relatively mixed results. Nevertheless, the consensus from the existing empirical literature seems to be that most households succeed in protecting their consumption from the full effects of the income shocks to which they are subject.

To understand why consumption smoothing may be incomplete and why variation is observed in the ability to smooth consumption, it is important to understand the mechanisms used towards this end. First is income diversification (that is, for agricultural households, diversification of crops and cattle, as well as seasonal wage work) or making conservative employment choices. After the onset of adverse shocks such as a bad monsoon, households can rely on different mechanisms,

including engaging in inter-temporal transfers (borrowing/lending, selling/accumulating assets), participating in inter-household transfers or risk-pooling arrangements (formal insurance, informal state-contingent transfers, 'disguised' insurance in labour or credit contracts), trying to generate a quick alternative income (migration, wage work, including of children, early sowing of the next harvest), etc.

Not all those methods are equally efficient, and their relative availability will determine the optimal strategy and welfare cost for stricken households. A large amount of literature provides evidence that each of these channels is used in developing countries to smoothen income to some extent.

In particular, several academic papers have used rainfall shocks as proxy or instrument to variation in transitory income and have shown at least some smoothing. However, literature studying the effect of monsoon quality on consumption, health, savings, labour supply and so on is still limited. Much more needs to be understood about how rural households respond to an event like a severe drought, how large the welfare impact is and how the costs are distributed among households. Further careful, systematic research on these questions would be very valuable, especially given the potential for climate change to amplify weather variation in future years and decades. This paper aims at contributing to the issue, thanks to a particularly interesting panel database providing detailed household-level data.

Given that the above-mentioned, risk-sharing mechanisms are largely imperfect, microfinance is expected to be potentially beneficial for the welfare of member households, in the face of income shocks. In existing studies, the ability of households to insure against such shocks has often been shown to crucially depend on their wealth and access to financial markets. In the presence of credit constraints, microfinance can help beneficiaries to invest in profitable enterprises as well as cope with the negative shocks in their lives more effectively, allowing households to borrow to smooth consumption over shocks rather than liquidate assets, for instance. Hence, it is reasonable to believe that microfinance could provide an efficient means to consumption smoothing and positively affect long-term livelihoods. This is especially true for microfinance institutions (MFIs) such as Indian SHGs that are readily accessible and which form the subject of the current study.

THE PROGRAM AND THE ENVIRONMENT UNDER STUDY

The Context

Data for the study comes from a very large microfinance programme in central India initiated by a development NGO called Professional Assistance for Development Action (PRADAN). The main objective of the organization is to promote and strengthen the livelihoods of socio-economically disadvantaged communities, such as indigenous people, women, scheduled castes, landless, and the marginal and small cultivators. Central to this broad agenda is microfinance, which is considered a means for the rural poor to make strategic investments in improving their livelihoods over time. Yet, unlike other microfinance models in which the NGO develops itself as the alternative credit provider, PRADAN organizes women in SHGs that become MFIs themselves. These SHGs are small informal village associations, which are engaged in a variety of collective activities, of which savings and credit are the most important. As on March 2012, PRADAN is active in eight states in India and has around 16,555 functioning SHGs.

This study focuses on the state of Jharkhand. It is among the poorest of all 27 Indian states, with 46 per cent of its rural population below the national poverty line and a female literacy rate of 38.9 per cent, 15 percentage points below the national average. Jharkhand is mostly rural (78 per cent of its 30 million inhabitants). Its population comprises 28 per cent tribals and 12 per cent Scheduled Castes (SCs), who are known to be the most vulnerable groups of Indian society. The present study focusses on villages only, which are extremely isolated, on an average. Here, the main source of livelihood is subsistence agriculture and seasonal labour work. Rain-fed paddy is the predominant crop in the state, followed by pulses, maize, wheat and oilseeds. The backwardness of agriculture in the state is contributed by poor water control strategy, largely characterized by erratic rainfall, coupled with low irrigation coverage. These characteristics imply that the food security needs of households can be met through own cultivation for at most six months of the year.

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SHGS AND PRADAN'S INTERVENTION

This study looked at PRADAN's SHG programme in 2004. PRADAN chooses to work with relatively disadvantaged communities and poor villages, within geographical clusters around its local offices, where no other NGO has worked before. A study by CGAP (an independent policy and research centres dedicated to advancing financial access for the world's poor) found that PRADAN had indeed deeper-than-average outreach (CGAP, "Sustainability of Self-Help Groups in India: Two Analyses," Occasional Paper 12, Consultative Group to Assist the Poor, August 2007). Almost all SHG members are tribal people or SCs, 85 per cent have no homestead land or only marginal non-agricultural landholdings and almost 90 per cent live in thatched huts or are squatters. To determine how effectively the SHG model reaches these populations, the CGAP study analyzed the locations of the 150 SHGs in a sample, and the economic and demographic profiles of their members. Most of the SHG members lived far from paved roads, bank branches, and health centres.

Establishing a group usually begins with a PRADAN representative holding a meeting at some public place in a village, such as the *panchayat* office or the primary school, where the details of the program are explained. After a few such meetings, a group of between 10 and 20 motivated women is formed. One important rule imposed by PRADAN is that there may be only one member per household as part of an SHG. If a village is large, or interest in the programme is widespread, multiple groups may be created. After some initial training and capacity building from the NGO, the group chooses a name for itself, agrees on a weekly meeting time and determines other group rules. The rules such as the minimum contribution per member at each meeting (usually Rs 5 or 10 per month), the interest rate charged on loans that are given to group members, and fines for non-attendance or late payments, etc., are also decided by consensus.

The group then elects three members to take on the permanent positions of president, secretary and cashier, who are also the group's

representatives to the bank. An accountant is chosen; she/he attends every group meeting and is responsible for recording all transactions and maintaining the books of the group. After a few months of smooth functioning, a savings account is opened at a commercial bank near the village to deposit the group savings. Usually, after about a year, the groups showing mature financial behaviour are enabled to take bank loans for a variety of income generating activities (the group is then said to be *linked*). At this point, the intervention of the NGO is only required to solve occasional problems (though PRADAN keeps track of the financial records of all SHGs through regular reports of the accountants). The bank-linked SHG model is a very decentralized, cheap and potentially sustainable way of providing access to reliable savings and credit services in rural areas and other potential benefits from the group structure, such as peer support and other social services.

INSURANCE AGAINST INCOME SHOCKS THROUGH SHGS

Primarily, SHGs allow members to borrow (and save) money in the face of income shocks. Several features of SHGs are important in this respect. First, SHGs meet weekly (or even more often if needed) and there is no fixed order in loan taking. That is, members can ask any amount at any time—with the important restrictions that (i) the group needs to agree and (ii) the money needs to be available. Second, repayment is somewhat flexible. Third, SHGs lend out from accumulated savings and external bank loans. As a consequence, even though SHGs are essentially village institutions, several members can take loans together and are potentially able to insure against even covariate shocks (like rainfall shocks), at least partly. Yet, SHGs certainly go beyond mere credit and savings activities. They constitute strong groups of peers meeting regularly, which gives individuals information on what others are doing as well as a strong reason to stay together. Consequently, SHGs can potentially help members to smooth income, through self-insurance in the form of borrowing. Finally, it must be emphasized that even large rainfall shocks are certainly not fully covariate because there exists important heterogeneity among members regarding land ownership (from no land to relatively big plots), main occupation, assets, family structure, etc.

DATA

Household Data

Three rounds of household panel data, from 2004 to 2009, were collected. The sample was selected using a stratified sampling strategy. Jharkhand was divided into four geographical clusters, based on historical differences in ecological and demographic characteristics: Northeastern (Santhal Parganas districts), Central (Hazaribagh and surrounding districts), Southwest (Ranchi-Lohardaga districts) and Southeast Jharkhand (Singhbhum districts). For each cluster, a simple random sample of six villages was chosen from the set of all villages with at least one SHG formed in 2002 (the first year of the programme). In each of those villages, 36 respondents were randomly selected-18 being SHG members and 18 being non-members from the same village. In addition, 12 control villages with no SHGs were randomly selected in the same districts, in which 18 households were randomly selected and interviewed. This constituted the final sample, which adds up to 1,080 households from 36 villages and 9 districts. The surveys were always carried in the same period of the year, namely, January–March, which corresponds to a rather slack, post-harvest period at the end of the monsoon season. The questionnaire included detailed information on many aspects of the living standards of households, including

demographics, recurrent and durable expenditure, consumption, credit and savings, labour market participation, self-employment, migration, food vulnerability, landholdings and agriculture, dwelling conditions, health, education, female empowerment, participation in key activities in and out of the village. This threw up broad indicators that were either fixed or slow to change.

The bank-linked SHG model is a very decentralized, cheap and potentially sustainable way of providing access to reliable savings and credit services in rural areas and other potential benefits from the group structure, such as peer support and other social services.

Rainfall Data

Data from 1998 to 2008 for these 9 districts were retrieved. Given that the survey took place between January and March, and that Indian rains are mostly concentrated between June and September (southwest monsoon), the main reference rainfall episode for each round was June–September of the previous year.

Statistically, Jharkhand is not a drought-prone area; it has an average annual rainfall of about 130 cm. Nevertheless, it suffers from the extreme concentration and volatility of rainfall: more than 80 per cent of the rainfall comes between June and September, which implies that some years can be extremely wet whereas others can be extremely dry. Substantial variation was detected in our sample, both across districts and over time. The Southeastern Plateau receives relatively more rain and has the highest cropping intensity; the Central and Northeastern Plateau is the biggest zone presenting a lower intensity, and the Western Plateau is the hilliest region, with an agricultural profile comparable to the previous region. Predominantly, rice and maize are cultivated in all three regions, pulses in the Central and Northeastern Plateau as well as the Western Plateau, and wheat in the Central and Northeastern Plateau.

Not only is rainfall variable, but also crucial. The study sample comprised small landholders, who largely practise subsistence agriculture with limited marketable surplus. Rice, in particular, often represents the main source of income. Indian food grain production, including rice production, is highly correlated with the amount of summer monsoon rainfall from June to September. This is partly due to the high poverty and low agricultural investment rates in Jharkhand. Given the high levels of risk and low levels of production, the resources available for inputs such as fertilizers and pesticides are meagre and most households tend to avoid such costly investments. Scanty rainfall during the *kharif* season is, therefore, likely to depress both income and agricultural productivity during the next calendar year, possibly right until the next *kharif* harvest. Jharkhand's rural population faces a 'hungry season' from June to October.

Rain shocks strongly affect the agricultural production of all households in the sample. Rain over the entire monsoon (June–September) appears a strong predictor of yields and income. SHG members do not experience any significant difference with respect to other members. This was perhaps anticipated because there is not much that can be done against poor rainfall when cultivating rain-fed rice (except, of course, investments such as irrigation, which are probably too costly for the size of SHG operations). Perhaps the role of SHGs is more about smoothing these unavoidable shocks.

EMPIRICAL STRATEGY

Rainfall shocks are plausibly exogenous

income shocks, given that they are essentially unan-ticipated at the start of the season. In theory, membership decisions could be influenced by the previous experience of shocks. Some limited movements into and out of membership occurred over time, which is why we also report estimates using contemporary membership because it is only if a household is actually a member at the date of the shock that it may derive any effect from membership. Reassuringly, results virtually do not change partly because movement in and out of membership is limited anyway. Because rainfall shocks are exogenous and spread over space, and we surveyed both members and non-members in each district, their incidence is by definition balanced between SHG members and comparison households. We can, therefore, examine the treatment effect of micro-credit on response to shocks, which is conditional on a shock having occurred. However, because of the self-selection into membership, SHG households may have decided to participate because they are more risk averse to start with. Rainfall is an exogenous and unanticipated shock to the transitory income of agricultural households, and the study estimates its differential impact on member and non-member households.

AGRICULTURE

An obvious starting point for analysis of the impact of rainfall is the agricultural sector, allowing for quantifying the importance of the shocks at hand. Moreover, given that at least some effects may be expected, agricultural outcomes will help validate the definition of rain shocks. The focus is mainly on rice because it represents 80 per cent of the total agricultural production of households on average (50 per cent of agricultural income) and is cultivated by 95 per cent of agricultural households (76 per cent of all households). Moreover, only *kharif* (or winter) rice is cultivated in the region, which is highly dependent on monsoon rains and is harvested just before the survey. By contrast, *rabi* crop cultivation during the dry season is relatively limited and is unequally distributed geographically, mainly because of under-investment in irrigation facilities. *Rabi* production, therefore, has only limited capacity to mitigate shocks to the main *kharif* production in the region.

The most important rains come in June and especially July (start of the monsoon) when rice needs to be transplanted in flooded fields. Clearly, the rainfall variable captures important agricultural shocks. However, SHG members do not appear different from other households. Yields are more sensitive to monsoon and especially to the small land ownerships, probably because more land means more diversification possibilities and/ or more wealth to invest in agricultural inputs. This, perhaps, reflects the use of different technologies (for example, seeds or irrigation) between these two sets of farms. Yields are also more responsive to rainfall if the head of the household specializes in agriculture.

The analysis of rice sales delivers similar insights as for production, that is, a significantly positive relationship with rain. It indicates that the production effect dominates any potential price effect that could exist (for example, a relative abundance lowers market price). It also means that households sell a higher proportion of their production in case of good rain and less in case of bad rain. Market sales could theoretically be affected by the monsoon as well, to the extent that households would strategically store the rice to sell it in a period of scarcity. This does not seem to be the case in the sample study mainly because the survey asked about the land cultivated last year. In any case, considering the local environment,

small farmers do not resort to strategic storage because poor households lack the physical and behavioural ability to store rice for a long period.

Seen through the lens of food security, the probability of being 'rice sufficient' increases with rain for all households. A monsoon that is below average can lead to a loss of food security. Small-yields farmers are much more likely to be food insecure, on average and because of rain shocks. Agricultural expenses (including seeds and saplings, fertilizers, insecticides, renting in animals, labour and machinery, irrigation, fuel, transportation of production) follow the same trend as production, meaning that households do not seem to vary the (external) input intensity very much.

Rain shocks, to conclude therefore, strongly affect the agricultural production of all households in the sample. Rain over the entire monsoon appears a strong predictor of yields and income. SHG members do not experience any significant difference with respect to other members.

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CREDIT

In this section, the hypothesis that SHGs bring easier access to credit, even in periods of bad rain is being studied. First, in order to finance agricultural expenditure, either the 'immediate' effects that might happen simultaneously to rain shocks or in anticipation of bad harvest will be analysed, followed by, second, an analysis of the crucial 'stock' period, one year after the rain shocks. It is expected that households may seek credit in order to make two ends meet before the new harvest. At the same time, it may be in a period of acute shortage of credit if traditional lenders suffered bad harvests themselves. Third, the 'sales' period comes immediately after the harvest, in which credit may be taken to compensate lost revenue in case of bad harvest. Finally, the period two years after the rain shock is called 'reconstitution', in which households might need to reconstitute their net stock of debt, either by repaying a debt incurred or by returning to optimal debt and living levels, after a period of credit contraction.

The first dependent variable is whether or not an individual borrowed during the period. On average, the probability of borrowing an amount over the year is 75.4 per cent for SHG members and 53.6 per cent for other households. The second dependent variable is the total amount borrowed over the period. Amounts are less different between member and non-member households, reflecting the fact that non-members take on average bigger loans but less often.

Moreover, all households take lower total amounts of credit following a bad shock, which means that SHG members reduce the average amount borrowed per loan. It was found that there is not much impact of the current rain ('immediate' effect), but that there is a big impact of last year's rain. By contrast, the estimate for SHG members is the opposite, yielding an average effect, which is slightly negative: members take *less* credit than average after a generous rainfall. When focusing on negative shocks, the effects go in the same direction but are much larger: a negative rainfall shock is associated with a reduction in the borrowing probability of non-members by 50 per cent and an *increase* by 16 per cent for member households. That is,

whereas non-members experience a strong pro-cyclicality in their access to credit, members enjoy a stable or even counter-cyclical access.

Finally, there is some evidence of a reconstitution effect. Non-member households that have credit rationed after a bad shock try to bounce back the following year, and try to reduce their debt stock in two years. These effects do not apply to member households. The analysis of loan amounts delivers very similar results to the previous ones. Given that the need for credit is theoretically inversely related to the previous year's rainfall, most loans to non-members comes from moneylenders and relatives, who are almost always larger farmers living in the same village or its neighbourhood. By contrast, member households take most of their loans from SHGs, and their borrowing ability stays virtually unaffected by rain shocks. This is remarkable, in particular during the critical stock period, given that the basic concept underlying SHGs is the pooling of local resources, which could have been expected to dry up in case of adverse rainfall shocks. In conclusion, SHGs do not seem to break down in critical periods. To the contrary, there is some evidence that member households are able to borrow a bit more than average in case of negative shocks.

The second aspect of SHG resilience that was checked is the evolution of repayment performances (though the previous discussion implies that groups break even only with savings, at least for the modal member). Whereas outright defaults are extremely rare in the data, delays in repayment are frequent. It was observed that a bad monsoon affects the promptitude of repayment negatively, of SHG as well as other loans. However, the actual duration of SHG loans does not increase, mainly because the contractual duration stays stable (whereas it strongly increases for other loans). Consequently, whereas the extension of the repayment period might imply some cash shortage for normal lenders, the availability of savings implies that bad rainfall shocks have no major consequence on the sustainability of SHGs.

A last way of checking the availability of funds for lending in SHGs is to look at the passbook balance of members in 2009, which states the accumulated savings since joining the group. Given that each survey asked about all loans taken in the last two years, virtually the entire credit history of each member can be reconstructed from 2002 to 2009 (though with a gap in 2006). By comparing the total credit taken from the SHG since 2002 with the passbook balance in 2009, the long-term net position of each member can be gauged. The conclusion of such computation is clear: about 80 per cent of the sample is long-term net debtors, confirming that SHGs are powerful credit instruments over the long run. Indeed, if the general rule is to balance personal credit and savings, the only smoothing allowed is seasonal smoothing, which is clearly limited given that there is only one main harvest per year (though, of course, farming income can always be complemented by casual work off season). SHG members would probably benefit from more flexibility in the system of compulsory savings; at least once the groups have built up a reasonable pool of savings and become bank-linked.

Some additional insights as to why SHGs are able to keep lending in case of important and largely covariate shocks are that primarily SHG members do not lend to each other out of their *current* money but out of a pool of savings that is growing over time. Moreover, that pool is reinforced by external loans from commercial banks. That is, whereas the pooling is finite due to the limited scale of operation, SHGs work as

micro financial intermediaries, which can usually meet credit needs thanks to the collection of regular deposits and borrowing from commercial banks.

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CONSUMPTION

It was found that prices do respond to local rain shocks, reflecting the low integration of food markets in Jharkhand. As anticipated, the prices of rice and *arhar (kharif* pulses) are negatively associated with the intensity of the previous monsoon, that is, the prices respond to relative scarcity. By contrast, *masoor,* being a *rabi* pulse, is harvested in March–April and is, therefore, less dependent on rainfall. In any case, the previous monsoon could not affect their relative scarcity. It was found that they do not react to the last monsoon's intensity, but do react to the monsoon. Finally, vegetables have a short cycle, being harvested from November to April, and are consumed fresh. Therefore, vegetable consumption data in January–March will be affected by the previous monsoon (if anything). Vegetables might be less sensitive to rainfall because these are mostly grown on small, irrigated plots close to the house (though the possibility to irrigate usually depends on the quantity of rainfall). The overall consumption levels are rather stable with respect to monsoon intensity. Across different subcomponents it was observed that whereas grain consumption remains largely unaffected (being necessity goods), the consumption of vegetables correlates negatively with rainfall, and that the consumption of animal proteins (meat/fish/eggs) displays a strong positive correlation. Vegetables thus react to price increases whereas meat and fish may be considered superior goods that respond strongly to income. Because the monetary value of consumption was computed, the variations observed can result from variation in both quantities consumed and through median prices.

Therefore, the study also reports the evolution of quantities, for reasonably homogenous categories (rice and vegetables). When studying quantities, it was found that the consumption of rice does increase slightly with rain–reflecting the fact that households spread the consumption of the stock of home production over the year. Members do not have a different consumption profile from non-members. Hence, the extra credit they enjoy with respect to non-members in bad years does not seem to be used for this purpose. Yet, an important caveat lies in the timing of the survey, which was carried out in period of relative abundance right after the harvest. That is why we observe that even non-members enjoy a stable consumption; clearly, we do not expect SHG members to be any different in these circumstances (there is no reason why they should increase their consumption after a shock). However, this tells nothing about the potential use of credit for short-term consumption smoothing before the harvest, that is, when households are most hit.

In fact, given the large credit effect detected in that period, it is quite likely that SHG households do smooth consumption when there is the highest need to do so. The proportion of food that is purchased in order to reach a relatively stable consumption profile, households increase their external acquisition of food in case of low home production. As expected, rice consumption cannot vary much and home production traditionally represents an important share of total consumption. Here again, SHG members do not appear to behave differently than other households. The biggest

consumption shocks occur between the two winter harvests, towards the end of the year. The impact of monsoon intensity on total food purchases, using data from the pilot survey of 2002, suggests that food purchases are strongly affected by the rainfall of the previous year.

The biggest consumption shocks occur between the two winter harvests, towards the end of the year. The impact of monsoon intensity on total food purchases, using data from the pilot survey of 2002, suggests that food purchases are strongly affected by the rainfall of the previous year.

CONCLUSION

In developing countries, most poor households experience extremely variable income because of the combined effect of a large exposure to climatic, economic and policy shocks and a lack of appropriate insurance devices. Extreme weather events, in particular, are projected to become more frequent in a warming climate, leaving rain-fed agriculture and large populations in developing countries at great risk. In this context, reliable access to finance, in general, and credit, in particular, can potentially bring welfare-improving consumption-smoothing opportunities. This paper studied the extent and the nature of the reactions to rainfall shocks that are linked with microfinance participation for rural households in Jharkhand, India.

The study analyzed first-hand panel data about members of SHGs and control households, coupled with meteorological data at the district-level. It was found that agricultural production and income, consumption patterns and access to credit are all very dependent on the monsoon quality. On the other hand, member households enjoy a stable use of credit, opening the possibility of short-term consumption smoothing thanks to higher borrowing, following a bad rain shock. Moreover, SHG membership also allows some ex-ante risk mitigation, notably by diversifying the crop mix towards vegetables. Nevertheless, we suggest that the specific savings policy of the Indian SHG system, whereas ensuring its strong resilience in the face of adverse climatic shocks, might hinder its insurance power. Extreme weather events are projected to become more frequent in a warming climate.

Policy needs a better understanding of the magnitude of the impacts on rural households, the distribution across income groups and the coping strategies adopted. Climatic shocks are expected to increase in frequency and magnitude in the future, leaving rain-fed agriculture and populations in developing countries at great risk. It is well-established in the literature that recurring income shocks, as well as traditional risk-mitigating strategies and coping mechanisms, can be very costly for poor households. Indian SHGs are useful and effective credit instruments for rural households, which appear extremely resilient to weather shocks. However, their policy of forced savings might be too rigid in order to play an effective insurance role in case of important adverse shocks. Indeed, the most frequent behaviour at the member level is to fully collateralize credit with one's own regular savings over the year, this even after bad rain shocks. Though the seasonal smoothing it still offers is likely to bring substantial benefits to members, it might not be enough to absorb the consequences of a bad rice harvest. Therefore, either SHGs are able to relax the constraint for members to save regularly during periods of economic hardships, or they could be advantageously complemented by proper insurance devices, given the widely recognized difficulty of selling weather-based insurance products.

A mobilized and organized community is critical for preparing and implementing plans. Following up with the GPs and relevant government departments for sanctioning and proper implementation is equally important. The presence of a facilitating agency (such as PRADAN) is necessary for continuous co-ordination between the community and various government departments involved.

Pradan is a voluntary organization registered in Delhi under the Societies Registration Act. Pradan works through small teams of professionals in selected villages across eight states. The focus of Pradan's work is to promote and strengthen livelihoods for the rural poor. It involves organizing the poor, enhancing their capabilities, introducing ways to improve their income and linking them to banks, markets and other economic services. The professionals work directly with the poor, using their knowledge and skills to help remove poverty. News*R*each, Pradan's monthly journal is a forum for sharing the thoughts and experiences of these professionals working in remote and far-flung areas in the field. News*R*each helps them to reach out and connect with each other, the development fraternity and the outside world.

News*R*each is published by the National Resource Centre for Rural Livelihoods, housed in the Pradan Research and Resource Centre.

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Supported by the Aga Khan Foundation through the European Union co- financed SCALE Programme